

Data Validation Checklist
Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: TestAmerica - Savannah, GA
 Method: SW-846 8270D Low-Level (PAH)
 Matrix: Soil
 Reviewer: Karen M Trujillo, URS Group, Inc.
 Concurrence¹: Jenine Abbassi, URS Group, Inc.

Project No: 15263756.20000
 Job ID.: 680-100443-1
 Associated Samples: Refer to Attachment A (Sample Summary)
 Date(s) Collected: 04/12/2014
 Date: 02/20/2015
 Date: 03/03/2015

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (\leq 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; \leq 40 days from extraction to analysis)? If not, then J/UJ flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J flag sample result.			✓		
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.		✓		According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank is not associated with this sampling event.	

¹ Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Were target analytes detected in equipment/rinsate blanks?			✓		
13. Were analytes detected in samples below the blank contamination action level? If yes, U flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?		✓			
15. Was precision deemed acceptable as defined by the project plans?			✓		
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270D) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> • Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			<ul style="list-style-type: none"> • Instrument ID: CMSD • Initial Calibration: 04/18/2014 • ICV: 04/18/14 @ 14:15 	
19. Were calibration results within laboratory/project specifications? <ul style="list-style-type: none"> • ICAL (Criteria: ≤ 20 mean %RSD ($\leq 50\%$ for poor performers), OR $r \geq 0.995$, OR $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> ◦ If $%RSD > 20$ ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J flag positive results and UJ flag non-detects ◦ If mean RRF < 0.050 (< 0.010 for poor performers), then J flag positive results and R flag non-detects (unless the lab analyzed a detectability check standard) • ICV and CCV (ICV Criteria: $\leq \pm 30\%D$; CCV Criteria: $\leq \pm 20\%D$ ($\leq 50\%$ for poor performers) and RF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> ◦ If $%D >$ Control Limit ($> 50\%$ for poor performers), 	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
then J flag positive results and UJ flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ flag non-detected semivolatile target compounds					
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J flag positive results when %R >Upper Control Limit (UCL) and J/R flag results when %R <Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J flag positive results and UJ flag non-detects			✓	LCS Only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			Prep Batch 324604: 680-100443-2 (CV0244A-CS6"), MS/MSD	
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none">• If the native sample concentration >4x spiking level, then an evaluation of interference is not possible.• If either MS or MSD recovery meets control limits, qualification of data is not warranted.• MS and MSD %R<10: J and R Flag positive and ND results, respectively• MS and MSD %R >10 and <LCL: J Flag positive and UJ flag non-detect results• MS and MSD R% >UCL (or 140): J Flag positive results		✓		CV0244A-CS6" (680-100443-2): Benzo[k]fluoranthene MS and MSD @ 160 and 101%R (38-148). J Flag positive result In addition, MS and/or MSD recoveries did not meet control limits during the analysis of sample CV0244A-CS6" for Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Chrysene, Fluoranthene, Indeno[1,2,3-cd]pyrene, and Pyrene. Qualification of data is not warranted, because an evaluation of interference is not possible; the native sample concentration was more than 4 times the spiking level.	
26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none">• If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible.• If %RPD > UCL, J flag positive result and UJ flag non-detect result	✓				
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none">• If %R for 1 Acid or BN surrogates <10, then J flag positive and R flag non-detect associated sample results (i.e., acid or BN results)• If 2 or more Acid or BN %R >UCL, then J flag positive associated sample results (i.e., acid or BN results)		✓		Surrogate o-terphenyl was not recovered (0%) during the diluted analysis of samples 680-100443-2 and -3. Qualification of sample results is not warranted, as the surrogate compound was diluted out of the samples.	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
<ul style="list-style-type: none"> If 2 or more Acid or BN %R \geq10%, but <LCL, then J flag positive and UJ flag non-detect associated sample results (i.e., acid or BN results) If 2 or more Acid or BN , with 1 %R >UCL and 1 %R \geq10%, but <LCL, then J flag positive and UJ flag non-detect associated sample results (i.e., acid or BN results) 					
<p>28. Were internal standard (IS) results within lab/project specifications?</p> <ul style="list-style-type: none"> If IS area counts are less than 50% of the midpoint calibration standard, then J flag positive and UJ flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J flag positive and R flag non-detect results If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R flag associated data. The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 	✓				
29. Were lab comments included in report?	✓			Refer to Attachment B (Case Narrative)	

Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review (EPA, October 1999) and USEPA CLP NFG for Low Concentration Organic Methods Data Review (EPA, June 2001). Sample results have been qualified based on the results of the data review process (**Attachment C**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
 R The sample results are unusable. The analyte may or may not be present in the sample.
 U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
 UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A
SAMPLE SUMMARY

SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1
Sdg Number: 680-100443-01

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-100443-2	CV0244A-CS6"	Solid	04/12/2014 0855	04/15/2014 0956
680-100443-2MS	CV0244A-CS6"	Solid	04/12/2014 0855	04/15/2014 0956
680-100443-2MSD	CV0244A-CS6"	Solid	04/12/2014 0855	04/15/2014 0956
680-100443-3	CV0244A-CS12"	Solid	04/12/2014 0930	04/15/2014 0956

ATTACHMENT B
CASE NARRATIVE

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-100443-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 04/15/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH

Samples CV0244A-CS6" (680-100443-2) and CV0244A-CS12" (680-100443-3) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW846 Method 8270D.

Method(s) 8270D_LL_PAH: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 680-325086 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D_LL_PAH: The following sample(s) was diluted due to the nature of the sample matrix : CV0244A-CS12" (680-100443-3), CV0244A-CS6" (680-100443-2), CV0244A-CS6" (680-100443-2 MS), CV0244A-CS6" (680-100443-2 MSD). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

PERCENT SOLIDS/MOISTURE

Samples CV0244A-CS6" (680-100443-2) and CV0244A-CS12" (680-100443-3) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP.

ATTACHMENT C

QUALIFIED SAMPLE RESULTS

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Client Sample ID: CV0244A-CS6"

Lab Sample ID: 680-100443-2

Matrix: Solid

Lab File ID: DD1817.D

Analysis Method: 8270D_LL_PAH

Date Collected: 04/12/2014 08:55

Extract. Method: 3546

Date Extracted: 04/16/2014 11:40

Sample wt/vol: 30.01(g)

Date Analyzed: 04/18/2014 17:31

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 16.5

GPC Cleanup:(Y/N) N

Analysis Batch No.: 325086

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	41	J	80	39
208-96-8	Acenaphthylene	80	U	80	39
120-12-7	Anthracene	160		80	39
56-55-3	Benzo[a]anthracene	2200		80	39
50-32-8	Benzo[a]pyrene	3200		80	14
205-99-2	Benzo[b]fluoranthene	4500		80	39
191-24-2	Benzo[g,h,i]perylene	2000		80	39
207-08-9	Benzo[k]fluoranthene	1600		80	24
218-01-9	Chrysene	2500		80	39
53-70-3	Dibenz(a,h)anthracene	660		80	39
206-44-0	Fluoranthene	2200		80	39
86-73-7	Fluorene	80	U	80	39
193-39-5	Indeno[1,2,3-cd]pyrene	2000		80	39
90-12-0	1-Methylnaphthalene	80	U	80	37
91-57-6	2-Methylnaphthalene	41	J	80	39
91-20-3	Naphthalene	80	U	80	39
85-01-8	Phenanthrene	630		80	29
129-00-0	Pyrene	2000		80	39

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Client Sample ID: CV0244A-CS12"

Lab Sample ID: 680-100443-3

Matrix: Solid

Lab File ID: DD1818.D

Analysis Method: 8270D_LL_PAH

Date Collected: 04/12/2014 09:30

Extract. Method: 3546

Date Extracted: 04/16/2014 11:40

Sample wt/vol: 30.04(g)

Date Analyzed: 04/18/2014 17:54

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 2(uL)

Level: (low/med) Low

% Moisture: 20.2

GPC Cleanup:(Y/N) N

Analysis Batch No.: 325086

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	84	U	84	41
208-96-8	Acenaphthylene	53	J	84	41
120-12-7	Anthracene	80	J	84	41
56-55-3	Benzo[a]anthracene	560		84	41
50-32-8	Benzo[a]pyrene	630		84	15
205-99-2	Benzo[b]fluoranthene	950		84	41
191-24-2	Benzo[g,h,i]perylene	440		84	41
207-08-9	Benzo[k]fluoranthene	330	J	84	25
218-01-9	Chrysene	680		84	41
53-70-3	Dibenz(a,h)anthracene	120		84	41
206-44-0	Fluoranthene	820		84	41
86-73-7	Fluorene	84	U	84	41
193-39-5	Indeno[1,2,3-cd]pyrene	370		84	41
90-12-0	1-Methylnaphthalene	150		84	39
91-57-6	2-Methylnaphthalene	170		84	41
91-20-3	Naphthalene	120		84	41
85-01-8	Phenanthrene	420		84	30
129-00-0	Pyrene	760		84	41

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

ANALYTICAL REPORT

Job Number: 680-100443-1

SDG Number: 680-100443-01

Job Description: 35th Avenue Superfund Site

For:

Oneida Total Integrated Enterprises LLC
1220 Kennestone Circle
Suite 106
Marietta, GA 30060

Attention: Ms. Limari F Krebs



Approved for release.
Lisa M Harvey
Project Manager II
4/21/2014 5:19 PM

Lisa M Harvey, Project Manager II
5102 LaRoche Avenue, Savannah, GA, 31404
(912)354-7858 e.3221
lisa.harvey@testamericainc.com
04/21/2014

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #'s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

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CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-100443-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 04/15/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

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Method(s) 8270D_LL_PAH: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 680-325086 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D_LL_PAH: The following sample(s) was diluted due to the nature of the sample matrix : CV0244A-CS12" (680-100443-3), CV0244A-CS6" (680-100443-2), CV0244A-CS6" (680-100443-2 MS), CV0244A-CS6" (680-100443-2 MSD). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

PERCENT SOLIDS/MOISTURE

Samples CV0244A-CS6" (680-100443-2) and CV0244A-CS12" (680-100443-3) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP.

SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1
Sdg Number: 680-100443-01

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-100443-2	CV0244A-CS6"	Solid	04/12/2014 0855	04/15/2014 0956
680-100443-2MS	CV0244A-CS6"	Solid	04/12/2014 0855	04/15/2014 0956
680-100443-2MSD	CV0244A-CS6"	Solid	04/12/2014 0855	04/15/2014 0956
680-100443-3	CV0244A-CS12"	Solid	04/12/2014 0930	04/15/2014 0956

METHOD SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1
Sdg Number: 680-100443-01

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS) Low level PAH Microwave Extraction	TAL SAV TAL SAV	SW846 8270D_LL_PAH SW846 3546	
Percent Moisture	TAL SAV	EPA Moisture	

Lab References:

TAL SAV = TestAmerica Savannah

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1
Sdg Number: 680-100443-01

Method	Analyst	Analyst ID
SW846 8270D_LL_PAH	Moore, Ron A	RAM
EPA Moisture	Kicklighter, Marilyn D	MDK

DATA REPORTING QUALIFIERS

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1

Sdg Number: 680-100443-01

Lab Section	Qualifier	Description
GC/MS Semi VOA	U	Indicates the analyte was analyzed for but not detected.
	F1	MS and/or MSD Recovery exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

Quality Control Results

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1
Sdg Number: 680-100443-01

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 680-324604					
LCS 680-324604/4-A	Lab Control Sample	T	Solid	3546	
MB 680-324604/3-A	Method Blank	T	Solid	3546	
680-100443-2	CV0244A-CS6"	T	Solid	3546	
680-100443-2MS	Matrix Spike	T	Solid	3546	
680-100443-2MSD	Matrix Spike Duplicate	T	Solid	3546	
680-100443-3	CV0244A-CS12"	T	Solid	3546	
Analysis Batch: 680-325086					
LCS 680-324604/4-A	Lab Control Sample	T	Solid	8270D_LL_PAH	680-324604
MB 680-324604/3-A	Method Blank	T	Solid	8270D_LL_PAH	680-324604
680-100443-2	CV0244A-CS6"	T	Solid	8270D_LL_PAH	680-324604
680-100443-2MS	Matrix Spike	T	Solid	8270D_LL_PAH	680-324604
680-100443-2MSD	Matrix Spike Duplicate	T	Solid	8270D_LL_PAH	680-324604
680-100443-3	CV0244A-CS12"	T	Solid	8270D_LL_PAH	680-324604

Report Basis

T = Total

General Chemistry

Analysis Batch: 680-324583					
680-100443-2	CV0244A-CS6"	T	Solid	Moisture	
680-100443-2MS	Matrix Spike	T	Solid	Moisture	
680-100443-2MSD	Matrix Spike Duplicate	T	Solid	Moisture	
680-100443-3	CV0244A-CS12"	T	Solid	Moisture	

Report Basis

T = Total

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica SavannahJob No.: 680-100443-1SDG No.: 680-100443-01Instrument ID: CMSDAnalysis Batch Number: 325086Lab Sample ID: 680-100443-2 MSClient Sample ID: CV0244A-CS6" MSDate Analyzed: 04/18/14 16:45Lab File ID: DD1815.DGC Column: RXi- 5Sil MS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	10.01	Split Peak	moorer	04/19/14 13:27
Benzo[k]fluoranthene	10.04	Split Peak	moorer	04/19/14 13:27

Lab Sample ID: 680-100443-2 MSDClient Sample ID: CV0244A-CS6" MSDDate Analyzed: 04/18/14 17:08Lab File ID: DD1816.DGC Column: RXi- 5Sil MS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[k]fluoranthene	10.04	Split Peak	moorer	04/19/14 13:33

Lab Sample ID: 680-100443-2Client Sample ID: CV0244A-CS6"Date Analyzed: 04/18/14 17:31Lab File ID: DD1817.DGC Column: RXi- 5Sil MS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	10.01	Split Peak	moorer	04/19/14 13:36
Benzo[k]fluoranthene	10.03	Split Peak	moorer	04/19/14 13:36

Lab Sample ID: 680-100443-3Client Sample ID: CV0244A-CS12"Date Analyzed: 04/18/14 17:54Lab File ID: DD1818.DGC Column: RXi- 5Sil MS ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	10.01	Split Peak	moorer	04/19/14 13:40
Benzo[k]fluoranthene	10.02	Split Peak	moorer	04/19/14 13:40

Method 8270D Low Level

**Semivolatile Organic Compounds
(GC/MS) Low Level by Method 8270D**

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Matrix: Solid

Level: Low

GC Column (1): RXi- 5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	OTPH #
CV0244A-CS6"	680-100443-2	0 D
CV0244A-CS12"	680-100443-3	0 D
	MB 680-324604/3-A	87
	LCS 680-324604/4-A	73
CV0244A-CS6" MS	680-100443-2 MS	0 D
CV0244A-CS6" MSD	680-100443-2 MSD	0 D

OTPH = o-Terphenyl

QC LIMITS
36-131

Column to be used to flag recovery values

FORM II 8270D_LL_PAH

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Matrix: Solid

Level: Low

Lab File ID: DD1814.D

Lab ID: LCS 680-324604/4-A

Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acenaphthene	333	258	77	33-130	
Acenaphthylene	333	254	76	37-131	
Anthracene	333	313	94	42-146	
Benzo[a]anthracene	333	286	86	39-157	
Benzo[a]pyrene	333	296	89	41-158	
Benzo[b]fluoranthene	333	270	81	35-152	
Benzo[g,h,i]perylene	333	266	80	32-150	
Benzo[k]fluoranthene	333	275	82	38-148	
Chrysene	333	255	77	38-147	
Dibenz(a,h)anthracene	333	291	87	32-155	
Fluoranthene	333	285	86	36-147	
Fluorene	333	280	84	36-138	
Indeno[1,2,3-cd]pyrene	333	283	85	35-148	
1-Methylnaphthalene	333	237	71	36-130	
2-Methylnaphthalene	333	261	78	42-130	
Naphthalene	333	237	71	33-130	
Phenanthrene	333	264	79	40-135	
Pyrene	333	259	78	38-145	

Column to be used to flag recovery and RPD values

FORM III 8270D_LL_PAH

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
SDG No.: 680-100443-01
Matrix: Solid Level: Low Lab File ID: DD1815.D
Lab ID: 680-100443-2 MS Client ID: CV0244A-CS6" MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Acenaphthene	400	41 J	340	75	33-130	
Acenaphthylene	400	80 U	298	75	37-131	
Anthracene	400	160	512	88	42-146	
Benzo[a]anthracene	400	2200	2920	172	39-157	4
Benzo[a]pyrene	400	3200	4210	242	41-158	4
Benzo[b]fluoranthene	400	4500	5580	266	35-152	4
Benzo[g,h,i]perylene	400	2000	2560	146	32-150	4
Benzo[k]fluoranthene	400	1600	2230	160	38-148	F1
Chrysene	400	2500	3280	188	38-147	4
Dibenz(a,h)anthracene	400	660	1020	91	32-155	
Fluoranthene	400	2200	2850	172	36-147	4
Fluorene	400	80 U	339	85	36-138	
Indeno[1,2,3-cd]pyrene	400	2000	2630	159	35-148	4
1-Methylnaphthalene	400	80 U	302	75	36-130	
2-Methylnaphthalene	400	41 J	343	75	42-130	
Naphthalene	400	80 U	322	80	33-130	
Phenanthrene	400	630	1010	95	40-135	
Pyrene	400	2000	2520	139	38-145	4

Column to be used to flag recovery and RPD values

FORM III 8270D_LL_PAH

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
SDG No.: 680-100443-01
Matrix: Solid Level: Low Lab File ID: DD1816.D
Lab ID: 680-100443-2 MSD Client ID: CV0244A-CS6" MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acenaphthene	399	327	72	4	50	33-130	
Acenaphthylene	399	292	73	2	50	37-131	
Anthracene	399	501	86	2	50	42-146	
Benzo[a]anthracene	399	2760	133	5	50	39-157	4
Benzo[a]pyrene	399	3950	177	6	50	41-158	4
Benzo[b]fluoranthene	399	5800	321	4	50	35-152	4
Benzo[g,h,i]perylene	399	2340	90	9	50	32-150	4
Benzo[k]fluoranthene	399	2000	101	11	50	38-148	
Chrysene	399	3110	145	5	50	38-147	4
Dibenz(a,h)anthracene	399	943	72	8	50	32-155	
Fluoranthene	399	2840	171	0	50	36-147	4
Fluorene	399	332	83	2	50	36-138	
Indeno[1,2,3-cd]pyrene	399	2240	61	16	50	35-148	4
1-Methylnaphthalene	399	295	74	2	50	36-130	
2-Methylnaphthalene	399	335	74	2	50	42-130	
Naphthalene	399	315	79	2	50	33-130	
Phenanthrene	399	1000	92	1	50	40-135	
Pyrene	399	2410	112	4	50	38-145	4

Column to be used to flag recovery and RPD values

FORM III 8270D_LL_PAH

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
SDG No.: 680-100443-01
Lab File ID: DD1813.D Lab Sample ID: MB 680-324604/3-A
Matrix: Solid Date Extracted: 04/16/2014 11:40
Instrument ID: CMSD Date Analyzed: 04/18/2014 15:59
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-324604/4-A	DD1814.D	04/18/2014 16:22
CV0244A-CS6" MS	680-100443-2 MS	DD1815.D	04/18/2014 16:45
CV0244A-CS6" MSD	680-100443-2 MSD	DD1816.D	04/18/2014 17:08
CV0244A-CS6"	680-100443-2	DD1817.D	04/18/2014 17:31
CV0244A-CS12"	680-100443-3	DD1818.D	04/18/2014 17:54

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Lab File ID: DD1801.D DFTPP Injection Date: 04/18/2014

Instrument ID: CMSD DFTPP Injection Time: 11:08

Analysis Batch No.: 325086

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0 % of mass 442	54.0
68	Less than 2.0 % of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	58.6
70	Less than 2.0 % of mass 69	0.2 (0.3)1
127	10.0 - 80.0 % of mass 442	65.7
197	Less than 2.0 % of mass 198	0.0 (0.0)2
198	Greater than 50.0 % of mass 442	140.6
199	5.0 - 9.0 % of mass 198	8.7 (6.2)2
275	10.0 - 60.0 % of mass 442	37.1
365	Greater than 1.0 % of mass 442	4.7
441	Present but less than mass 443	15.9
442	Base Peak, 100% relative abundance	100.0
443	15.0 - 24.0 % of mass 442	19.0

1-Value is % mass 69

2-Value is % mass 198

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 680-325086/2	DD1802.D	04/18/2014	11:34
	IC 680-325086/3	DD1803.D	04/18/2014	11:57
	IC 680-325086/4	DD1804.D	04/18/2014	12:20
	IC 680-325086/5	DD1805.D	04/18/2014	12:43
	IC 680-325086/6	DD1806.D	04/18/2014	13:06
	IC 680-325086/7	DD1807.D	04/18/2014	13:29
	IC 680-325086/8	DD1808.D	04/18/2014	13:52
	ICV 680-325086/9	DD1809.D	04/18/2014	14:15
	MB 680-324604/3-A	DD1813.D	04/18/2014	15:59
	LCS 680-324604/4-A	DD1814.D	04/18/2014	16:22
CV0244A-CS6" MS	680-100443-2 MS	DD1815.D	04/18/2014	16:45
CV0244A-CS6" MSD	680-100443-2 MSD	DD1816.D	04/18/2014	17:08
CV0244A-CS6"	680-100443-2	DD1817.D	04/18/2014	17:31
CV0244A-CS12"	680-100443-3	DD1818.D	04/18/2014	17:54

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
SDG No.: 680-100443-01
Sample No.: ICIS 680-325086/2 Date Analyzed: 04/18/2014 11:34
Instrument ID: CMSD GC Column: RXi- 5Sil MS ID: 0.25 (mm)
Lab File ID (Standard): DD1802.D Heated Purge: (Y/N) N
Calibration ID: 28451

	NPT		ANT		PHN	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	658267	3.92	367294	5.41	589826	6.65
UPPER LIMIT	1316534	4.42	734588	5.91	1179652	7.15
LOWER LIMIT	329134	3.42	183647	4.91	294913	6.15
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-325086/9		601954	3.92	353100	5.40	572421
MB 680-324604/3-A		816927	3.92	456771	5.40	716868
LCS 680-324604/4-A		662623	3.92	375293	5.41	612413
680-100443-2 MS	CV0244A-CS6" MS	629332	3.92	357355	5.41	589950
680-100443-2 MSD	CV0244A-CS6" MSD	784245	3.92	441248	5.41	734632
680-100443-2	CV0244A-CS6"	758705	3.92	405451	5.41	647468
680-100443-3	CV0244A-CS12"	647302	3.92	349749	5.41	567667

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

PHN = Phenanthrene-d10

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
SDG No.: 680-100443-01
Sample No.: ICIS 680-325086/2 Date Analyzed: 04/18/2014 11:34
Instrument ID: CMSD GC Column: RXi- 5Sil MS ID: 0.25 (mm)
Lab File ID (Standard): DD1802.D Heated Purge: (Y/N) N
Calibration ID: 28451

	CRY		PRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MID-POINT	615929	8.99	483740	10.43		
UPPER LIMIT	1231858	9.49	967480	10.93		
LOWER LIMIT	307965	8.49	241870	9.93		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-325086/9		590459	8.99	452653	10.42	
MB 680-324604/3-A		694388	8.98	588006	10.42	
LCS 680-324604/4-A		679164	8.99	537105	10.42	
680-100443-2 MS	CV0244A-CS6" MS	652381	8.99	548642	10.43	
680-100443-2 MSD	CV0244A-CS6" MSD	830426	8.99	642405	10.44	
680-100443-2	CV0244A-CS6"	675128	8.99	553201	10.43	
680-100443-3	CV0244A-CS12"	567088	8.99	458104	10.43	

CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah	Job No.: 680-100443-1
SDG No.: 680-100443-01	
Client Sample ID: CV0244A-CS6"	Lab Sample ID: 680-100443-2
Matrix: Solid	Lab File ID: DD1817.D
Analysis Method: 8270D_LL_PAH	Date Collected: 04/12/2014 08:55
Extract. Method: 3546	Date Extracted: 04/16/2014 11:40
Sample wt/vol: 30.01(g)	Date Analyzed: 04/18/2014 17:31
Con. Extract Vol.: 1(mL)	Dilution Factor: 10
Injection Volume: 2(uL)	Level: (low/med) Low
% Moisture: 16.5	GPC Cleanup:(Y/N) N
Analysis Batch No.: 325086	Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	41	J	80	39
208-96-8	Acenaphthylene	80	U	80	39
120-12-7	Anthracene	160		80	39
56-55-3	Benzo[a]anthracene	2200		80	39
50-32-8	Benzo[a]pyrene	3200		80	14
205-99-2	Benzo[b]fluoranthene	4500		80	39
191-24-2	Benzo[g,h,i]perylene	2000		80	39
207-08-9	Benzo[k]fluoranthene	1600		80	24
218-01-9	Chrysene	2500		80	39
53-70-3	Dibenz(a,h)anthracene	660		80	39
206-44-0	Fluoranthene	2200		80	39
86-73-7	Fluorene	80	U	80	39
193-39-5	Indeno[1,2,3-cd]pyrene	2000		80	39
90-12-0	1-Methylnaphthalene	80	U	80	37
91-57-6	2-Methylnaphthalene	41	J	80	39
91-20-3	Naphthalene	80	U	80	39
85-01-8	Phenanthrene	630		80	29
129-00-0	Pyrene	2000		80	39

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1817.D
 Lims ID: 680-100443-A-2-A Lab Sample ID: 680-100443-2
 Client ID: CV0244A-CS6"
 Sample Type: Client
 Inject. Date: 18-Apr-2014 17:31:30 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Sample Info: 100443-A-2-A; DL10
 Misc. Info.: 680-0008209-017
 Operator ID: Instrument ID: CMSD
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 19-Apr-2014 13:48:47 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: moorer Date: 19-Apr-2014 13:36:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.922	3.920	0.002	99	758705	2.00	
* 2 Acenaphthene-d10	164	5.407	5.405	0.002	86	405451	2.00	
* 3 Phenanthrene-d10	188	6.646	6.645	0.001	98	647468	2.00	
* 4 Chrysene-d12	240	8.992	8.990	0.002	97	675128	2.00	
* 5 Perylene-d12	264	10.429	10.427	0.002	97	553201	2.00	
7 Naphthalene	128	3.938	3.936	0.002	90	36425	0.0932	
9 2-Methylnaphthalene	142	4.526	4.519	0.007	81	26102	0.1040	
8 1-Methylnaphthalene	142	4.606	4.604	0.002	76	15640	0.0604	
11 Acenaphthylene	152	5.290	5.283	0.007	88	15008	0.0432	7
12 Acenaphthene	153	5.434	5.432	0.002	70	24060	0.1037	
14 Fluorene	166	5.867	5.865	0.002	82	24461	0.0963	
15 Phenanthrene	178	6.668	6.666	0.002	97	574070	1.59	
16 Anthracene	178	6.711	6.709	0.002	98	124605	0.3981	
17 Fluoranthene	202	7.688	7.687	0.002	98	2098862	5.41	
18 Pyrene	202	7.891	7.890	0.001	97	2006091	4.93	
19 Benzo[a]anthracene	228	8.981	8.979	0.002	98	1930653	5.59	
20 Chrysene	228	9.013	9.011	0.002	96	2179022	6.34	
21 Benzo[b]fluoranthene	252	10.012	10.005	0.007	97	3955636	11.3	M
22 Benzo[k]fluoranthene	252	10.033	10.032	0.001	97	1397335	3.99	M
23 Benzo[a]pyrene	252	10.365	10.363	0.002	96	2350684	8.13	
24 Indeno[1,2,3-cd]pyrene	276	11.876	11.869	0.007	98	1587512	4.99	
25 Dibenz(a,h)anthracene	278	11.887	11.896	-0.009	55	460109	1.64	
26 Benzo[g,h,i]perylene	276	12.309	12.307	0.002	91	1435960	4.96	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

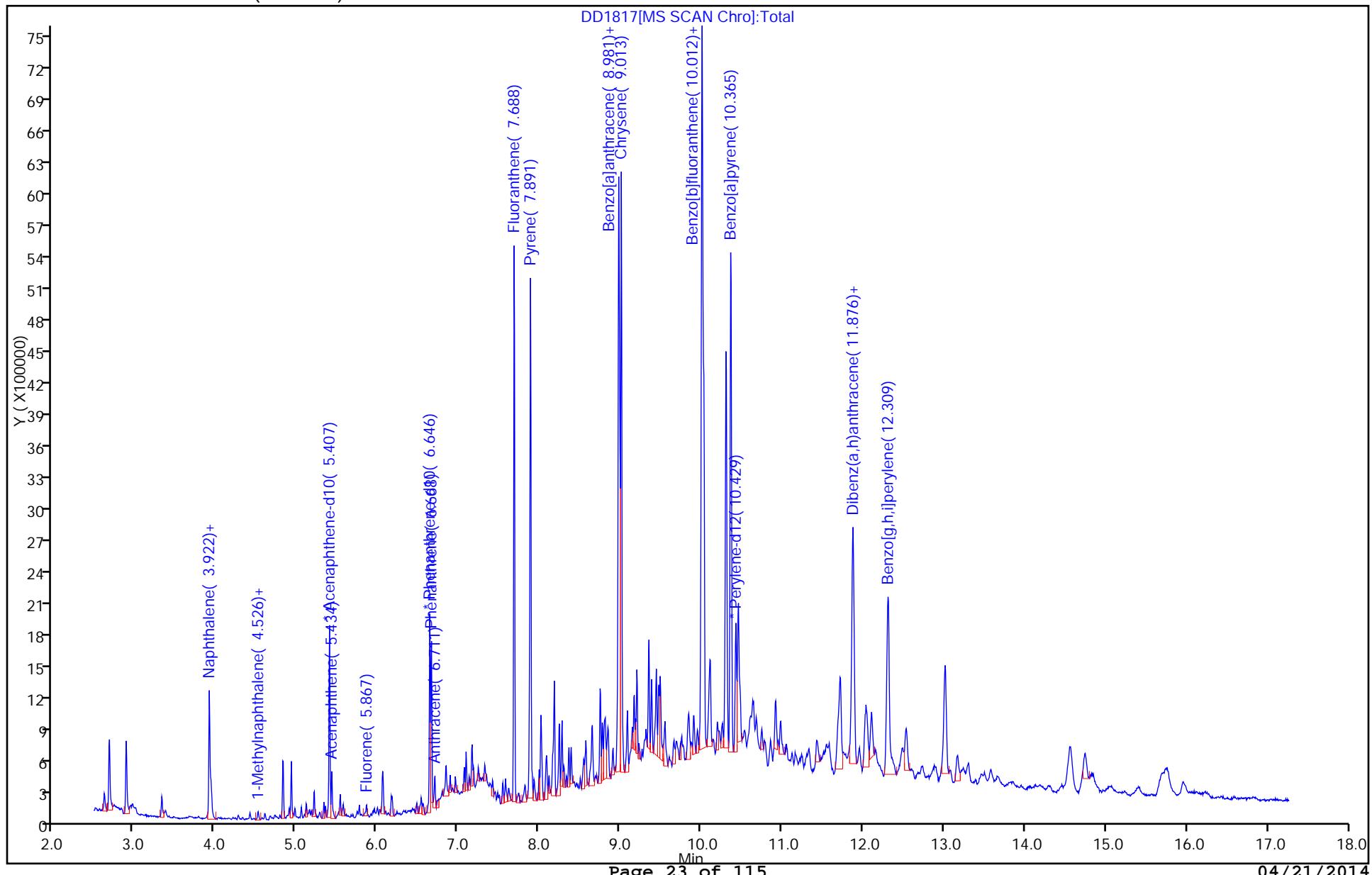
Report Date: 19-Apr-2014 13:48:57

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah
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 Injection Date: 18-Apr-2014 17:31:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-A Lab Sample ID: 680-100443-2
 Client ID: CV0244A-CS6"
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)

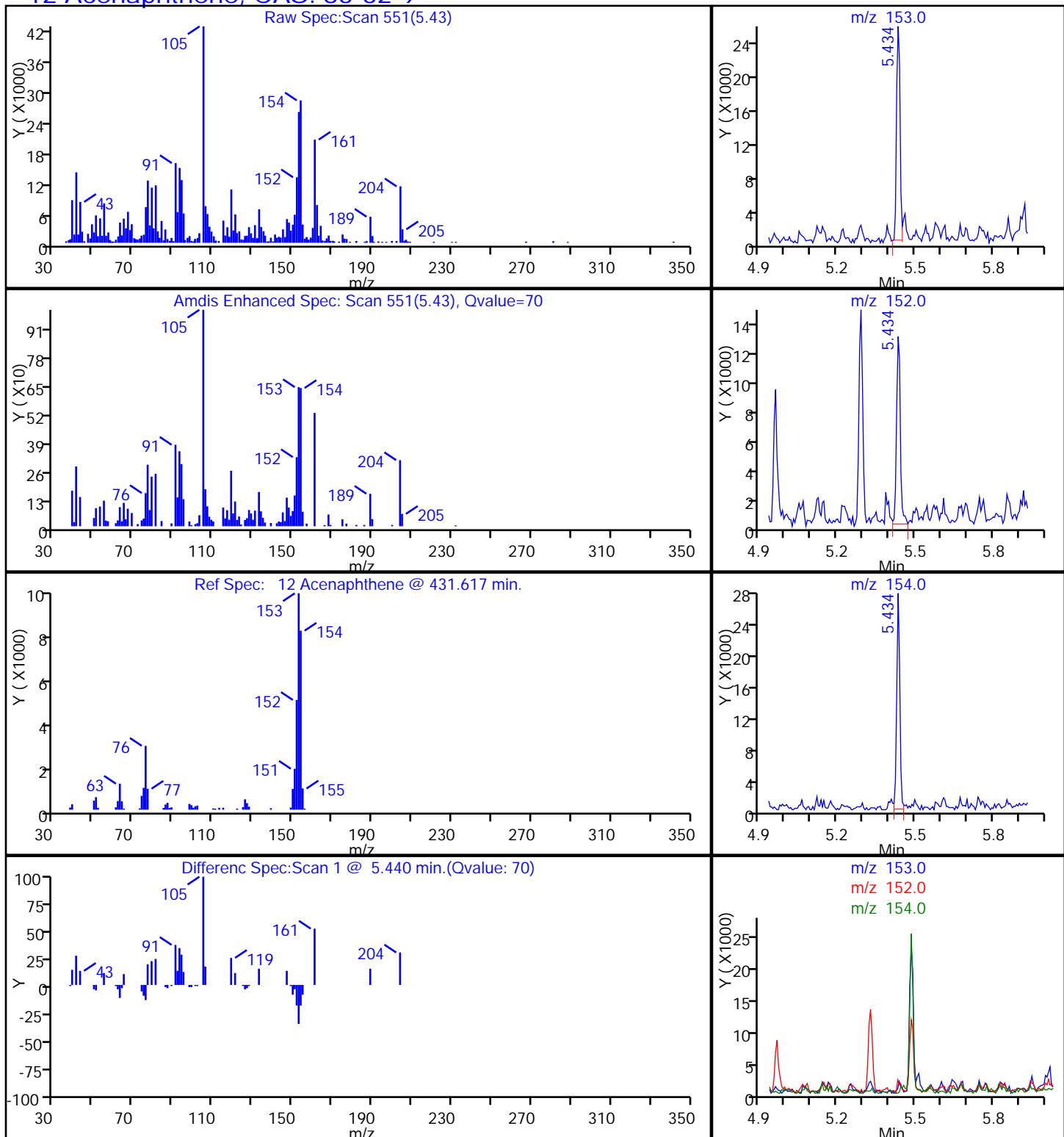
Operator ID:
 Worklist Smp#: 17

ALS Bottle#: 17



TestAmerica Savannah
 Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1817.D
 Injection Date: 18-Apr-2014 17:31:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-A Lab Sample ID: 680-100443-2
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

12 Acenaphthene, CAS: 83-32-9

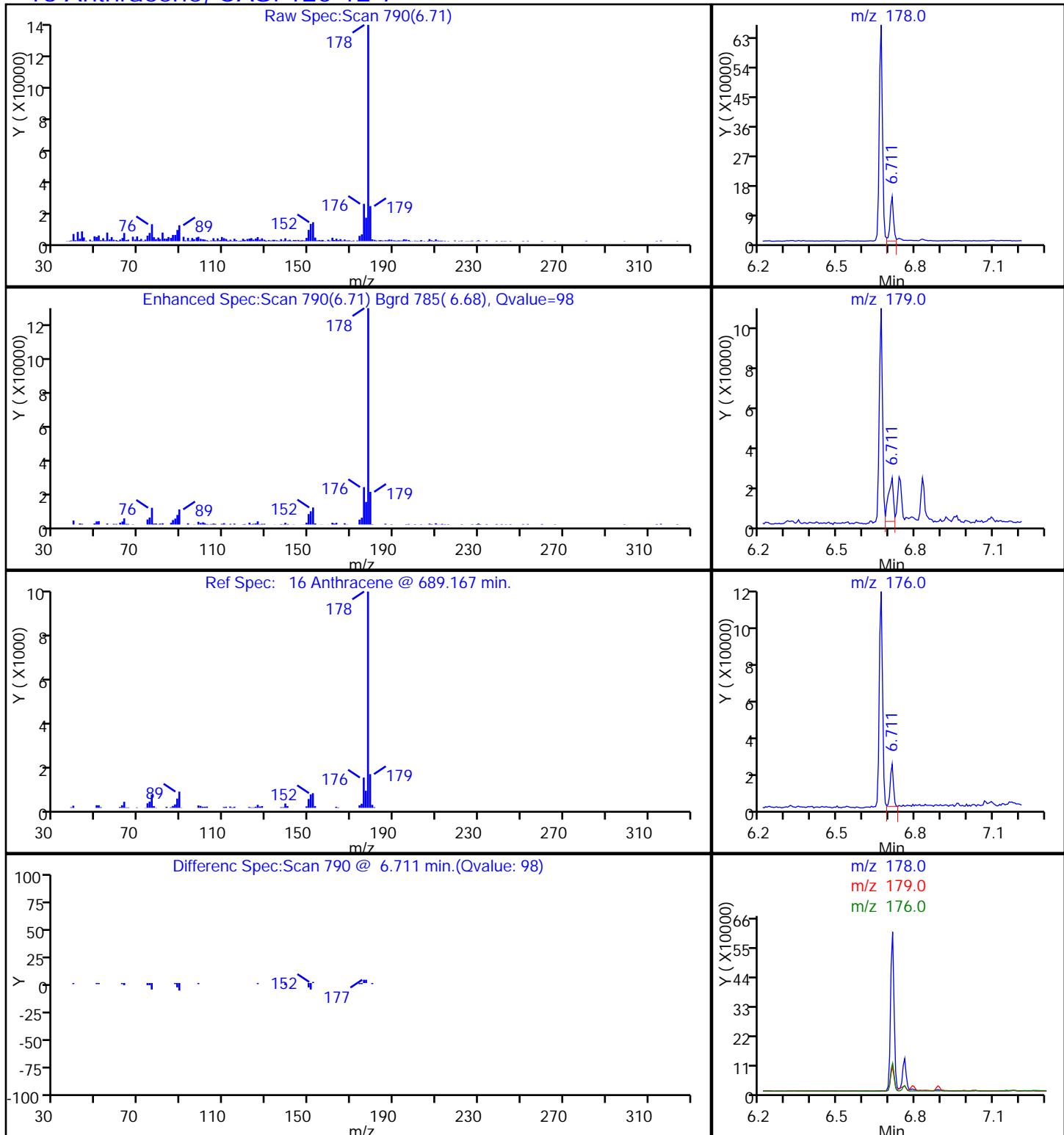


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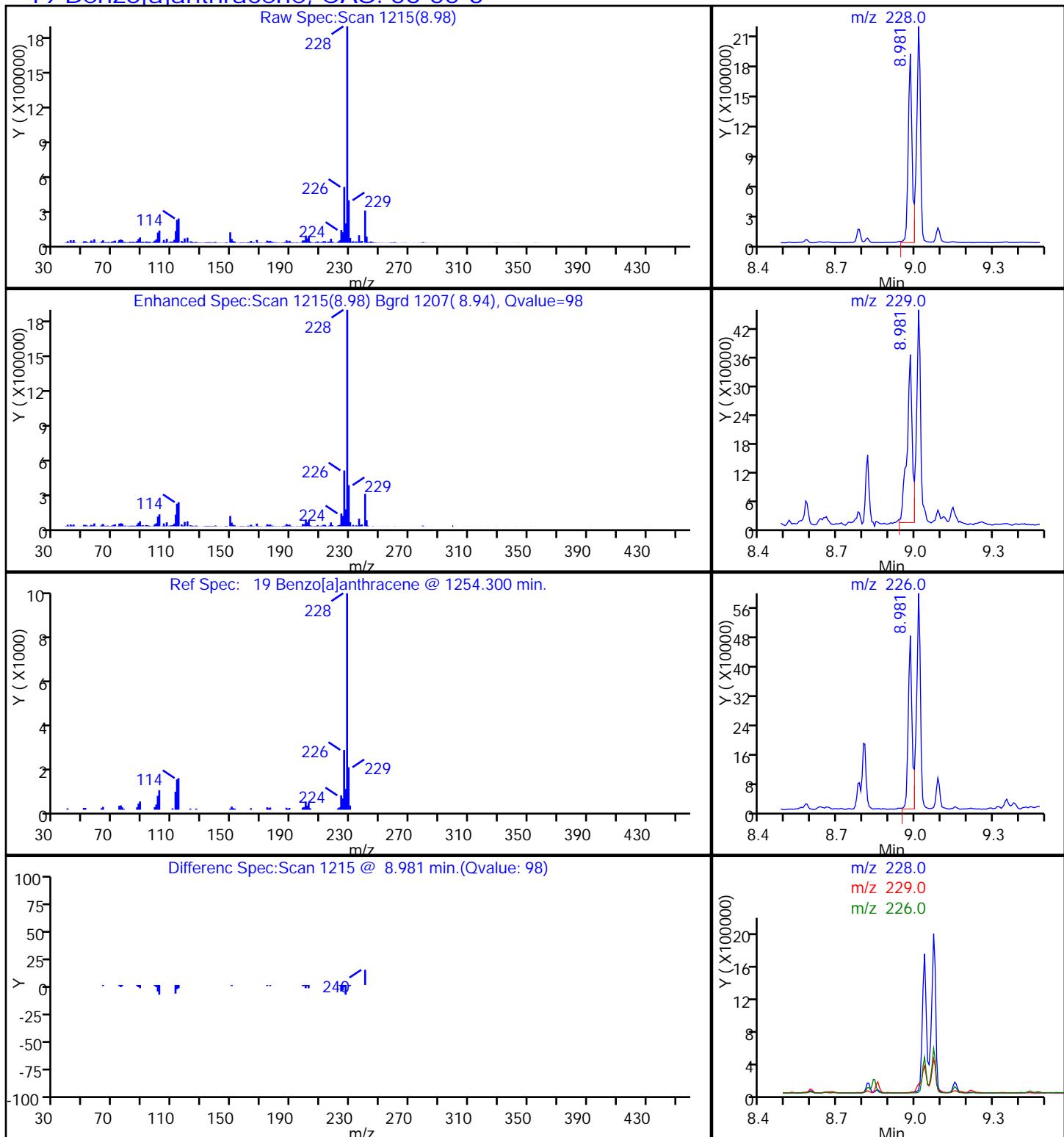
TestAmerica Savannah
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 Injection Date: 18-Apr-2014 17:31:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-A Lab Sample ID: 680-100443-2
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 W
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PA
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

16 Anthracene, CAS: 120-12-7

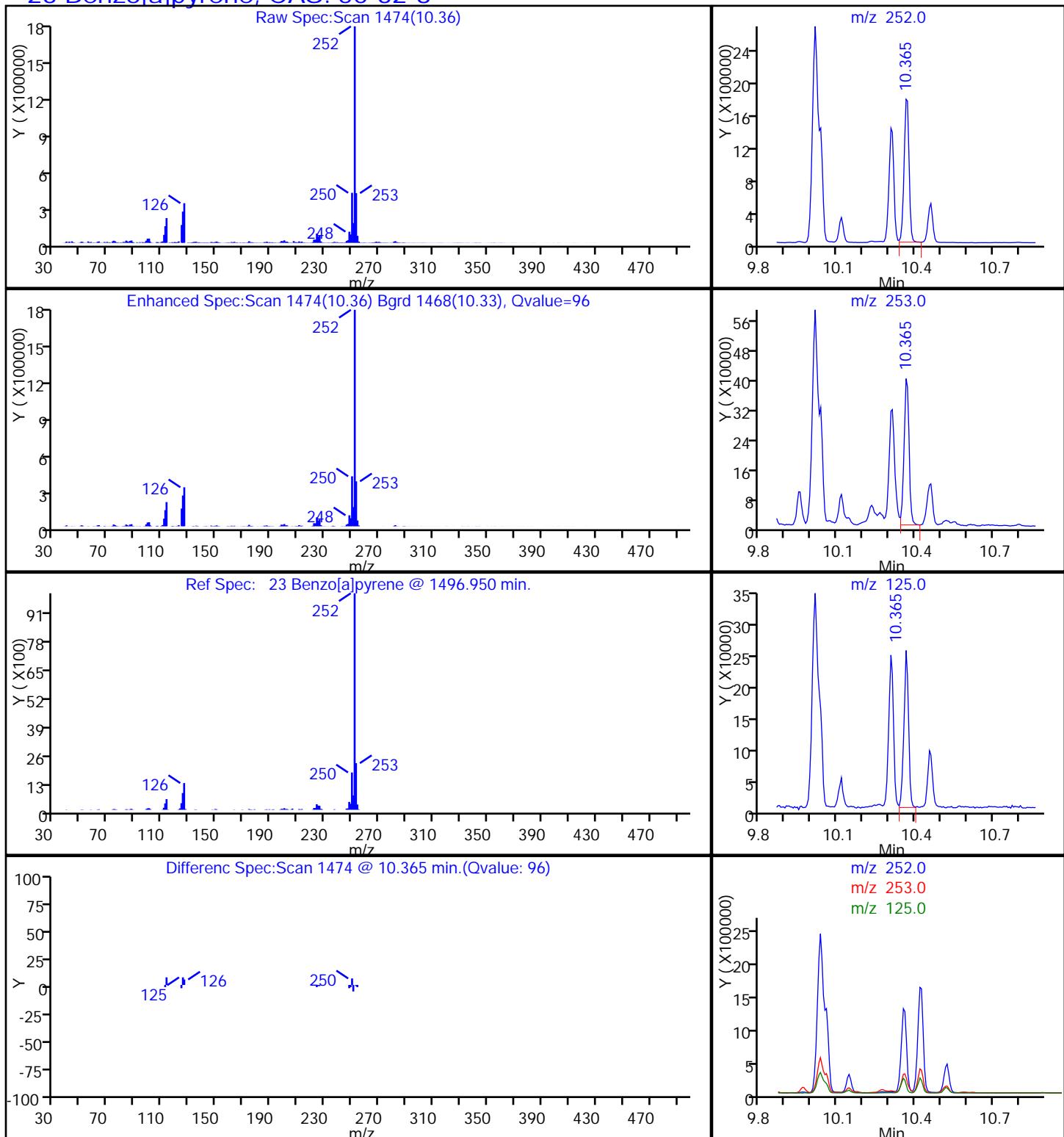


TestAmerica Savannah
 Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1817.D
 Injection Date: 18-Apr-2014 17:31:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-A Lab Sample ID: 680-100443-2
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

19 Benzo[a]anthracene, CAS: 56-55-3

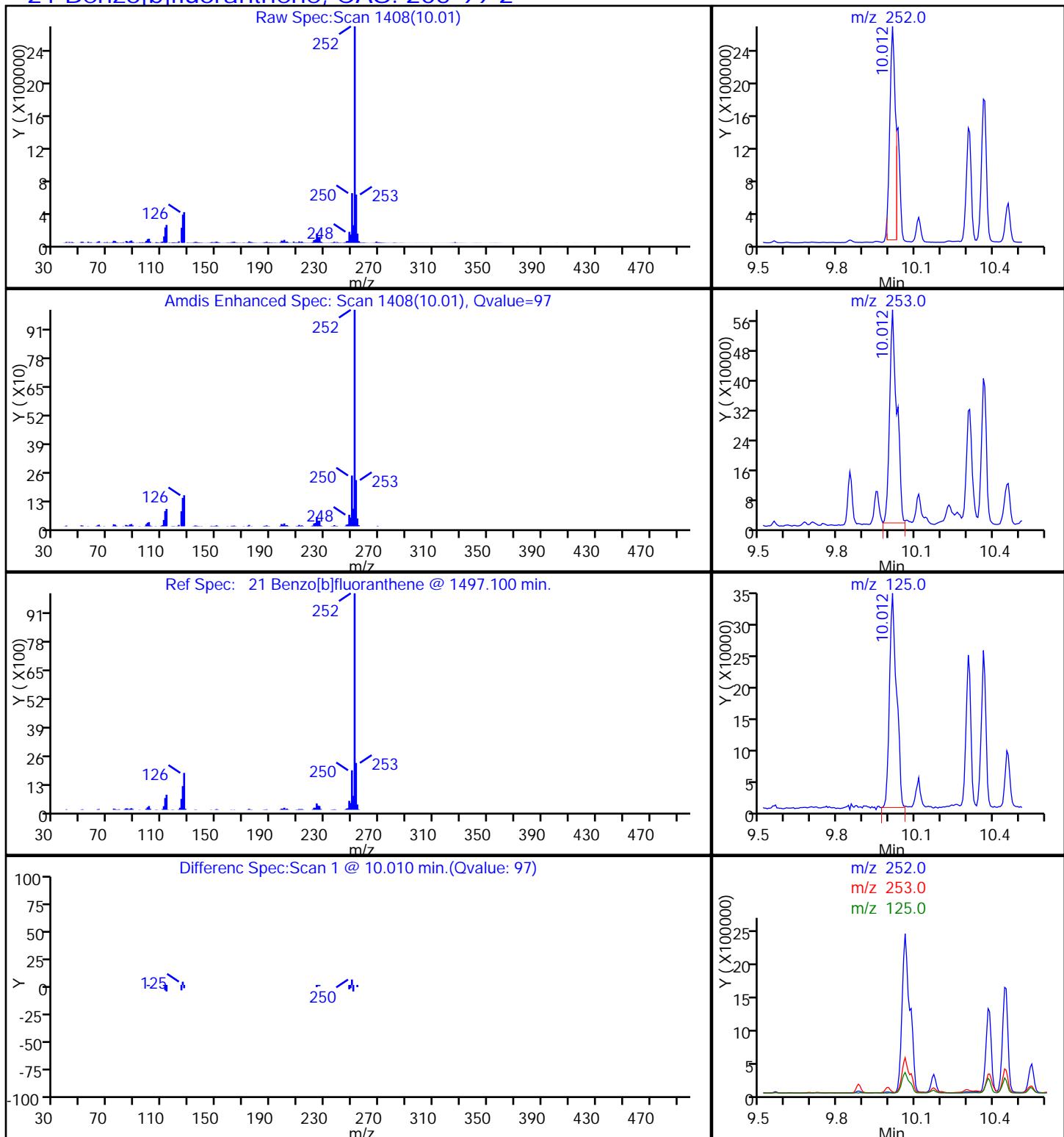


TestAmerica Savannah
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 Injection Date: 18-Apr-2014 17:31:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-A Lab Sample ID: 680-100443-2
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

23 Benzo[a]pyrene, CAS: 50-32-8

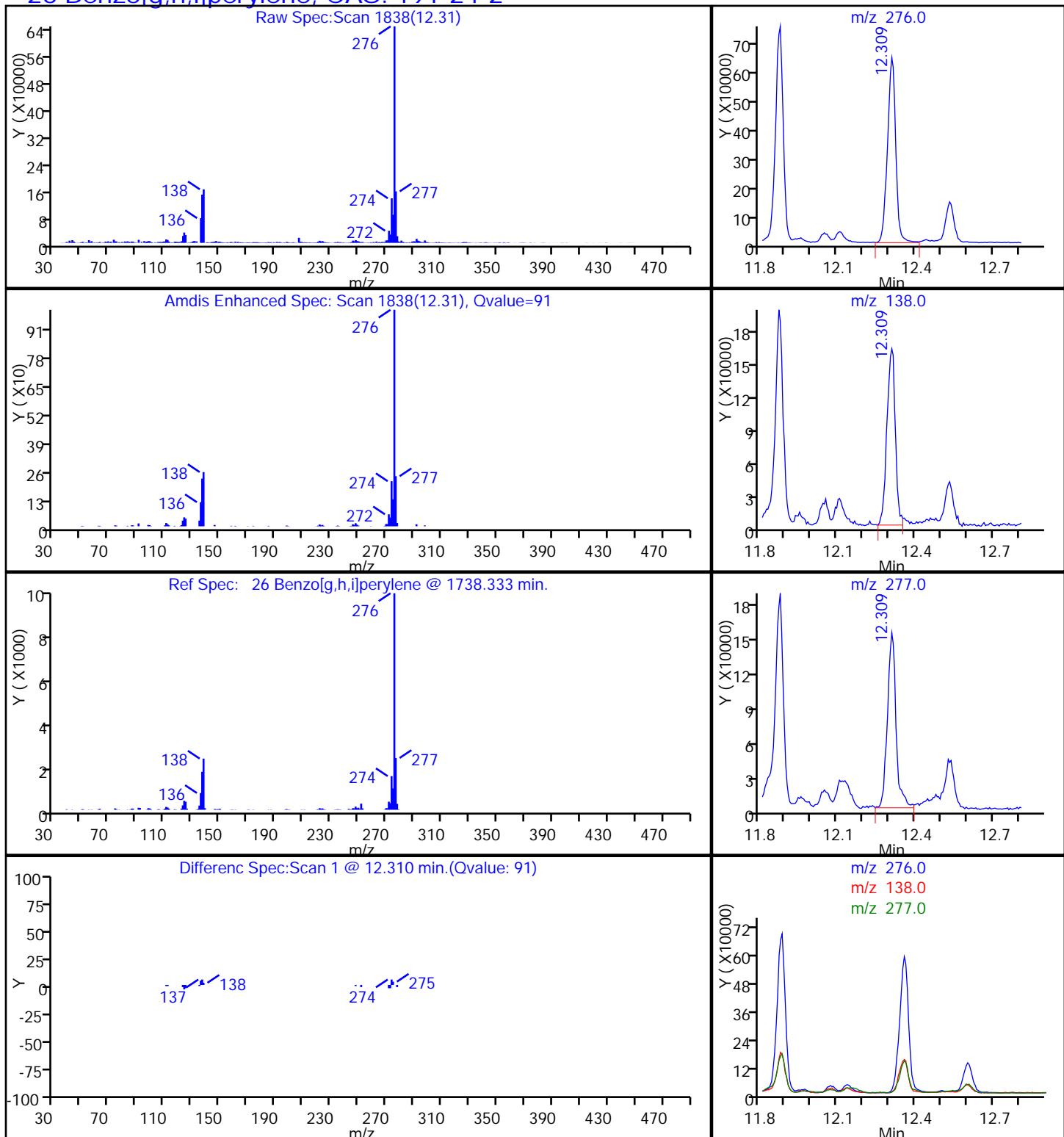
TestAmerica Savannah
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 Injection Date: 18-Apr-2014 17:31:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-A Lab Sample ID: 680-100443-2
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector MS SCAN

21 Benzo[b]fluoranthene, CAS: 205-99-2



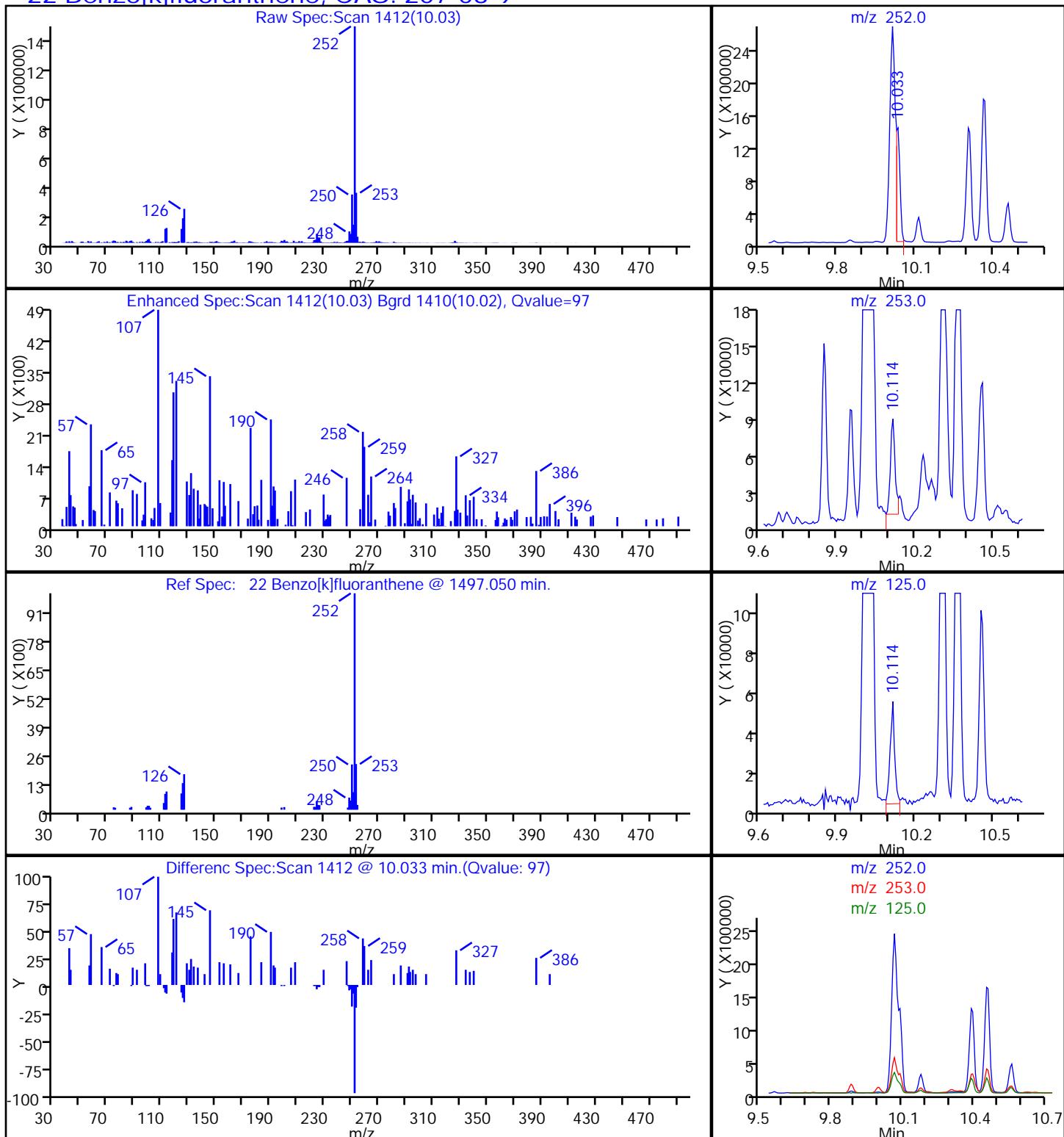
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 Injection Date: 18-Apr-2014 17:31:30 Instrument ID: CMSD
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 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

26 Benzo[g,h,i]perylene, CAS: 191-24-2



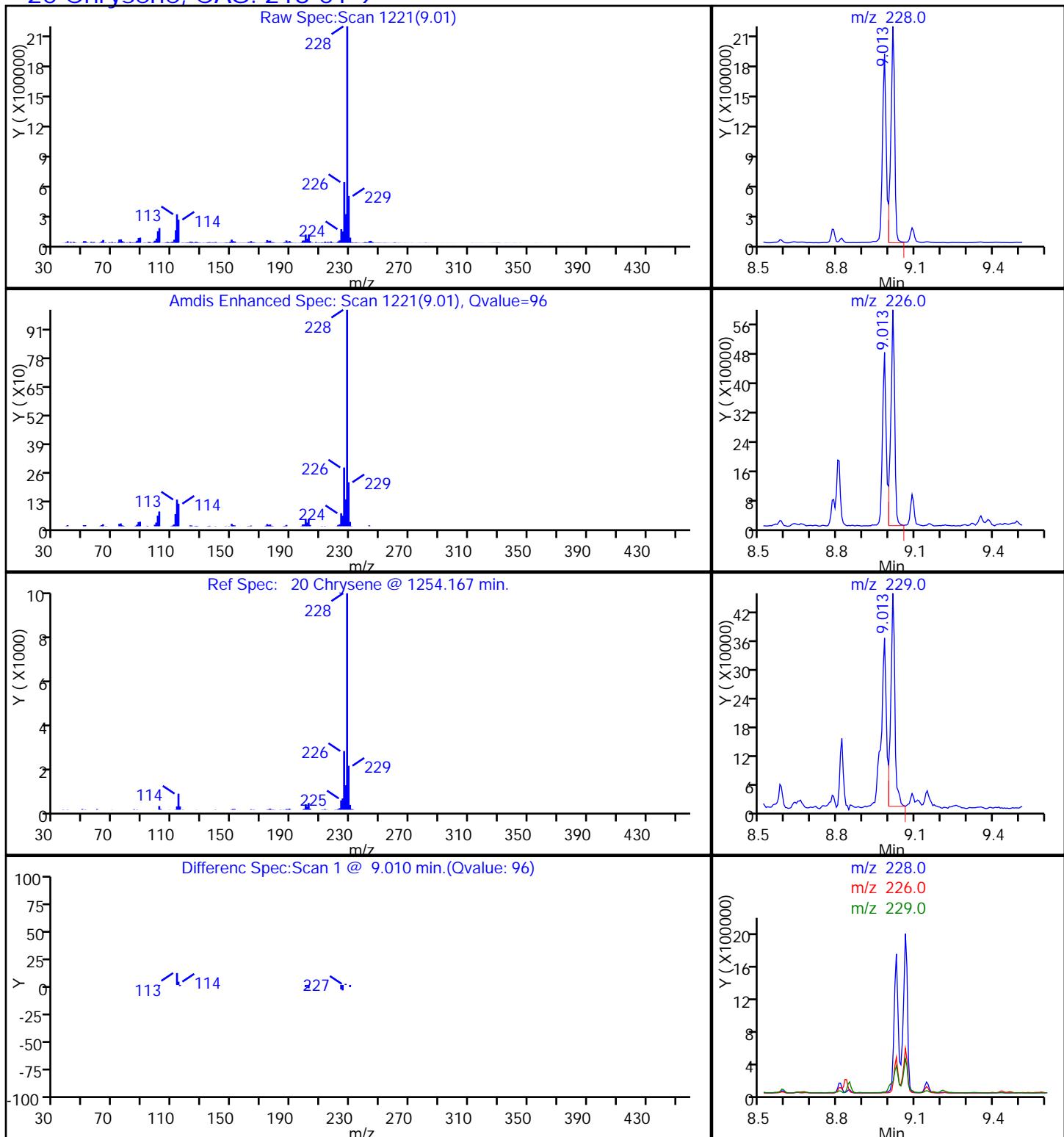
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
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 Column: Restek RXi-5Sil MS (0.25 mm) Detector MS SCAN

22 Benzo[k]fluoranthene, CAS: 207-08-9



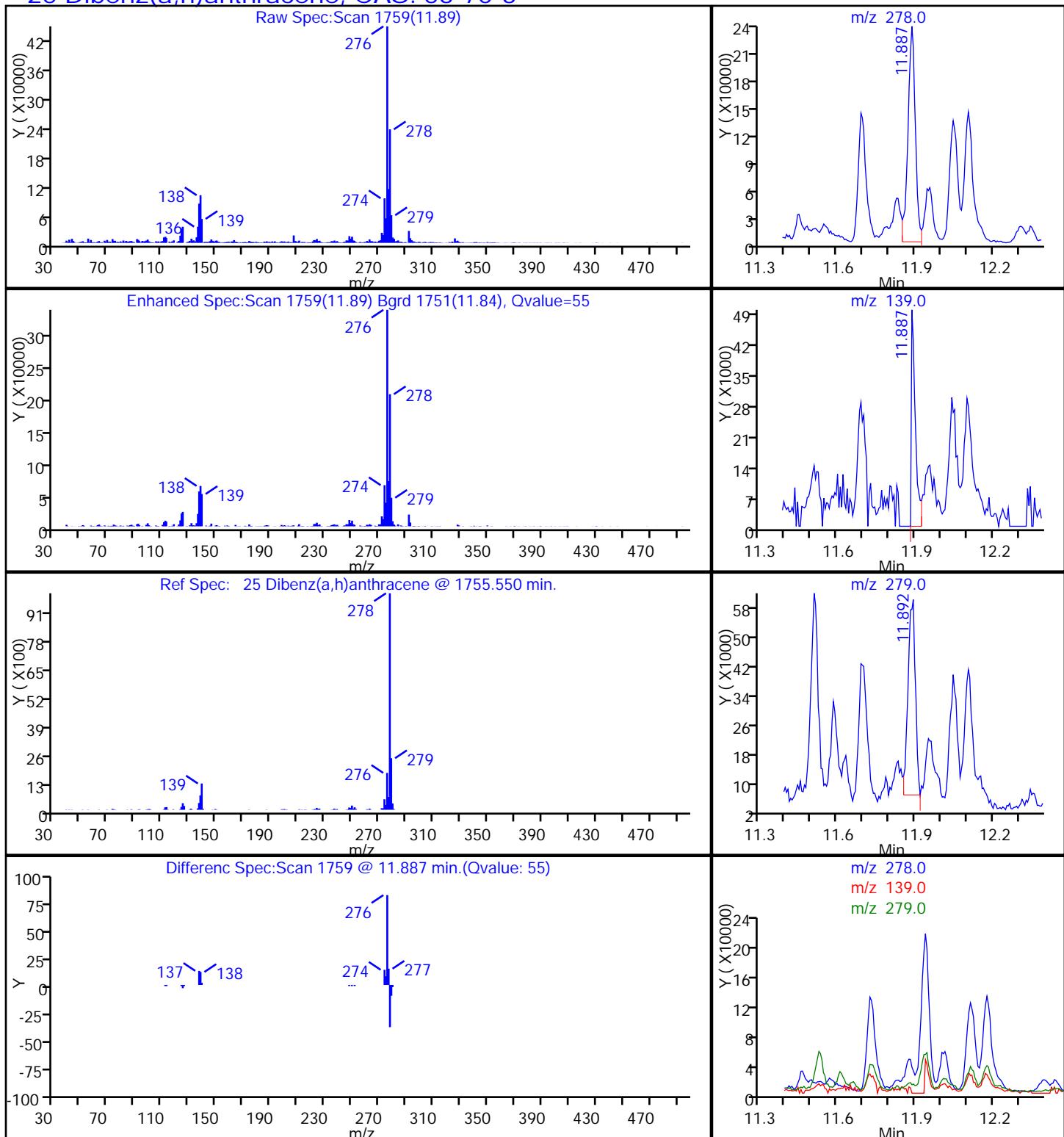
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
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20 Chrysene, CAS: 218-01-9



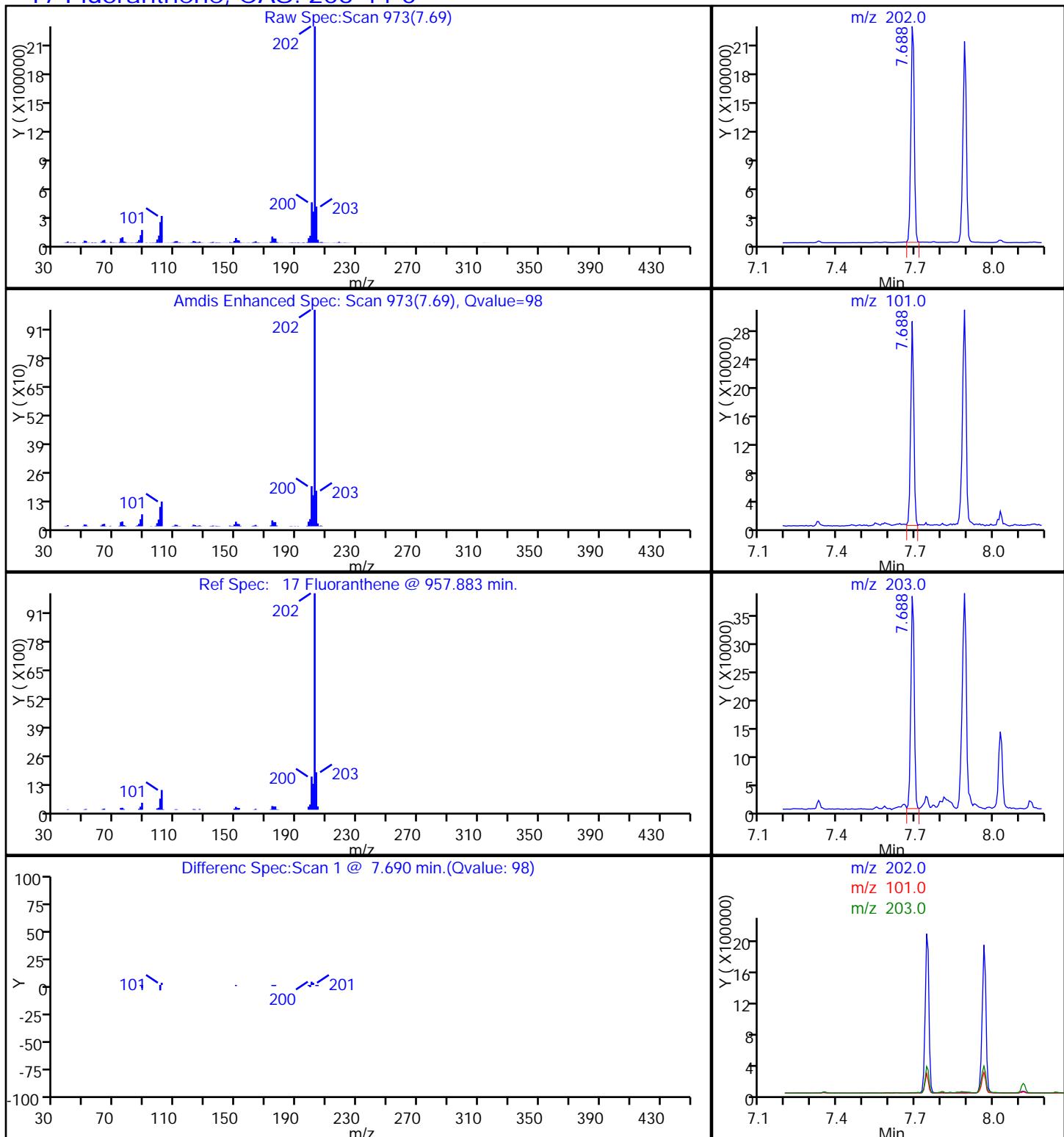
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 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector MS SCAN

25 Dibenz(a,h)anthracene, CAS: 53-70-3



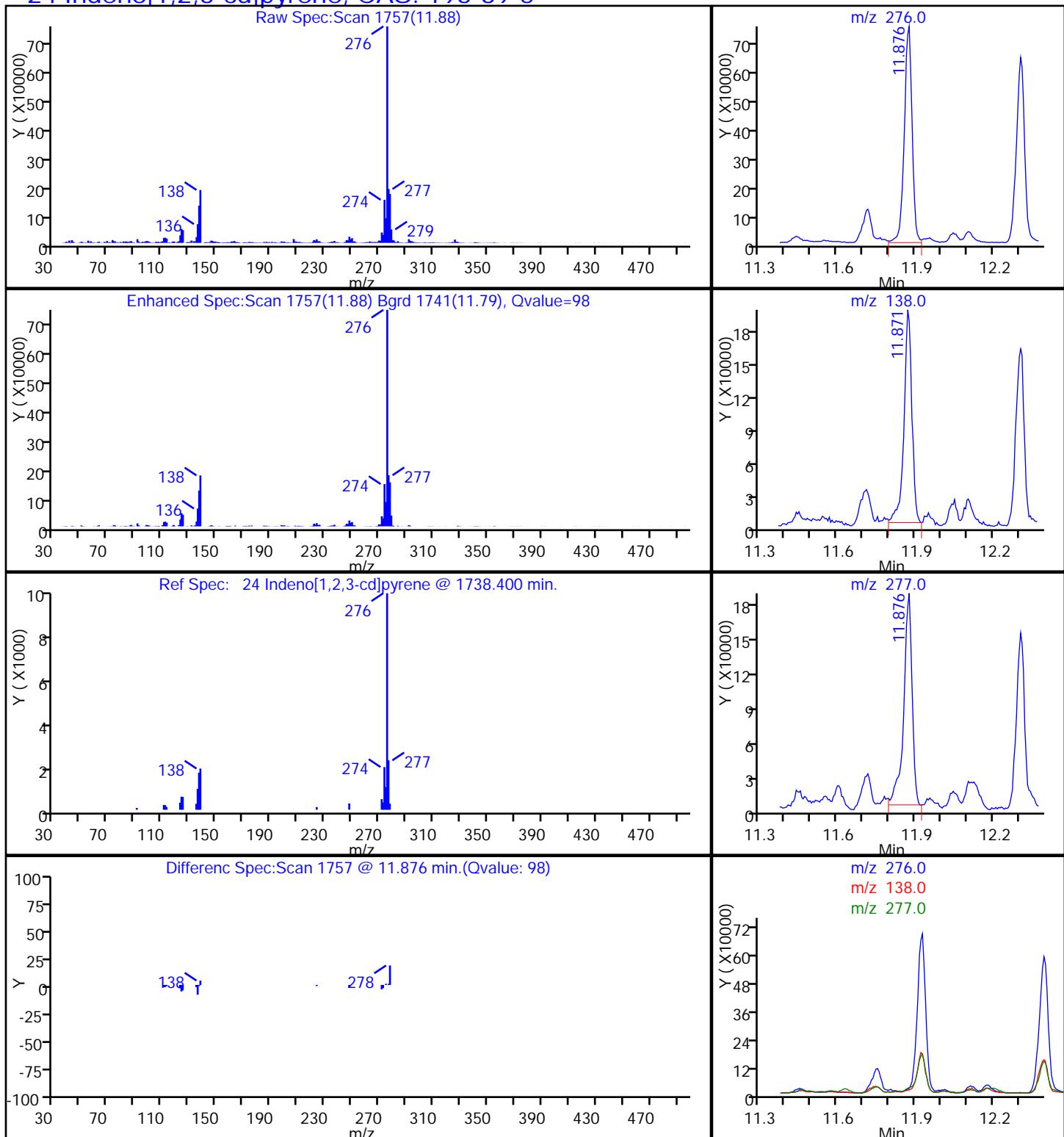
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
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 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

17 Fluoranthene, CAS: 206-44-0



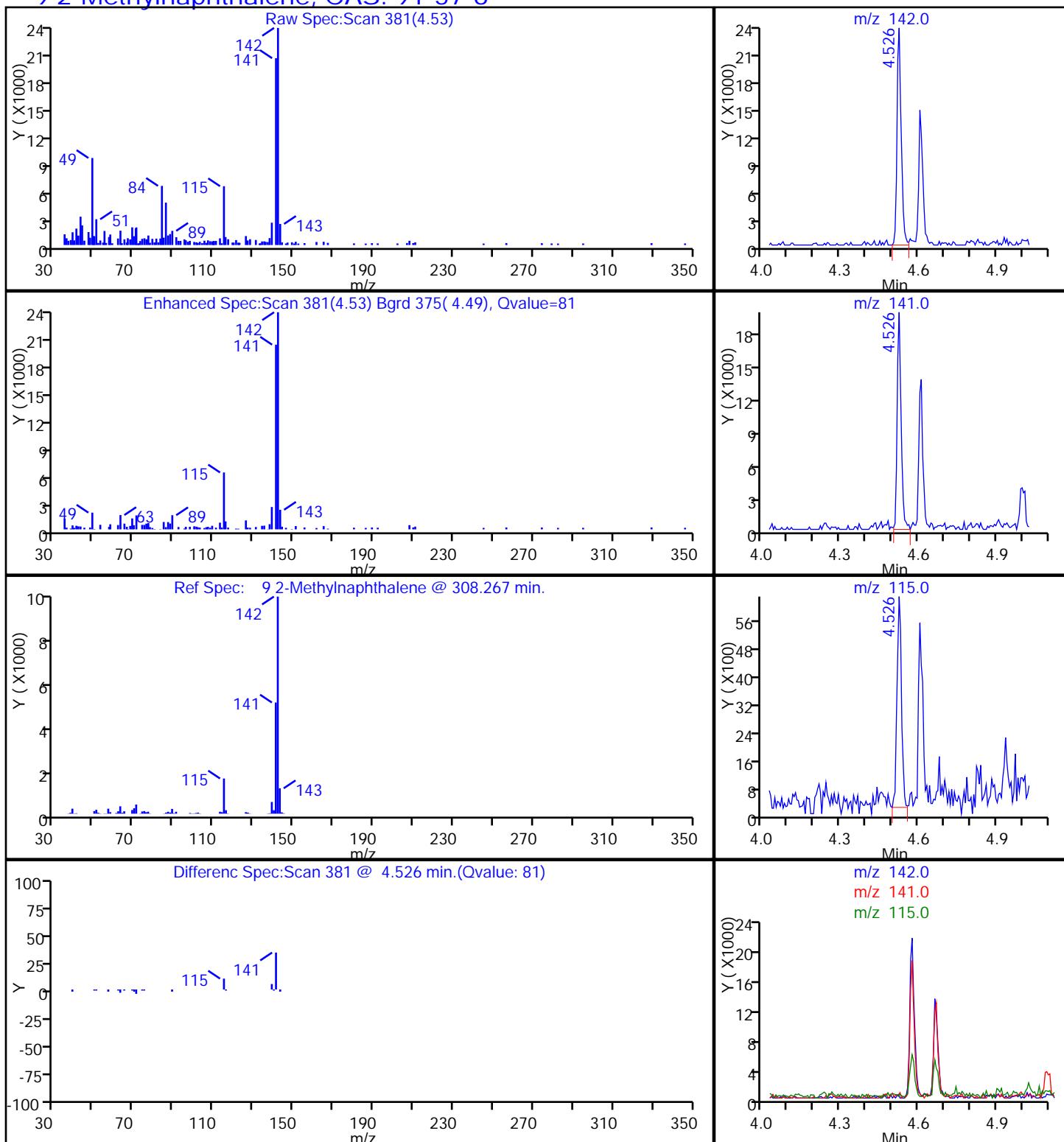
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 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector MS SCAN

24 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

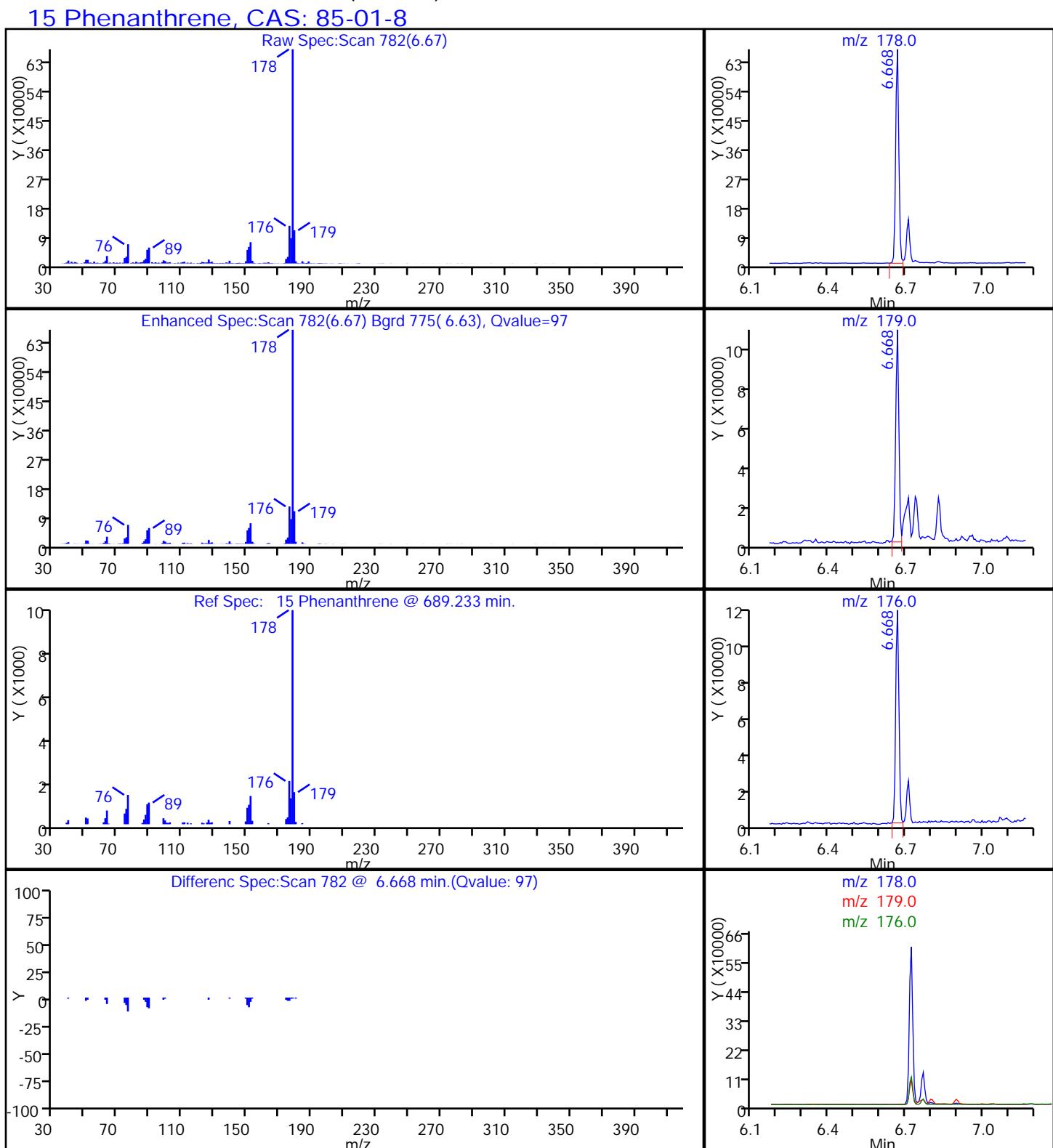


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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
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 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

9 2-Methylnaphthalene, CAS: 91-57-6

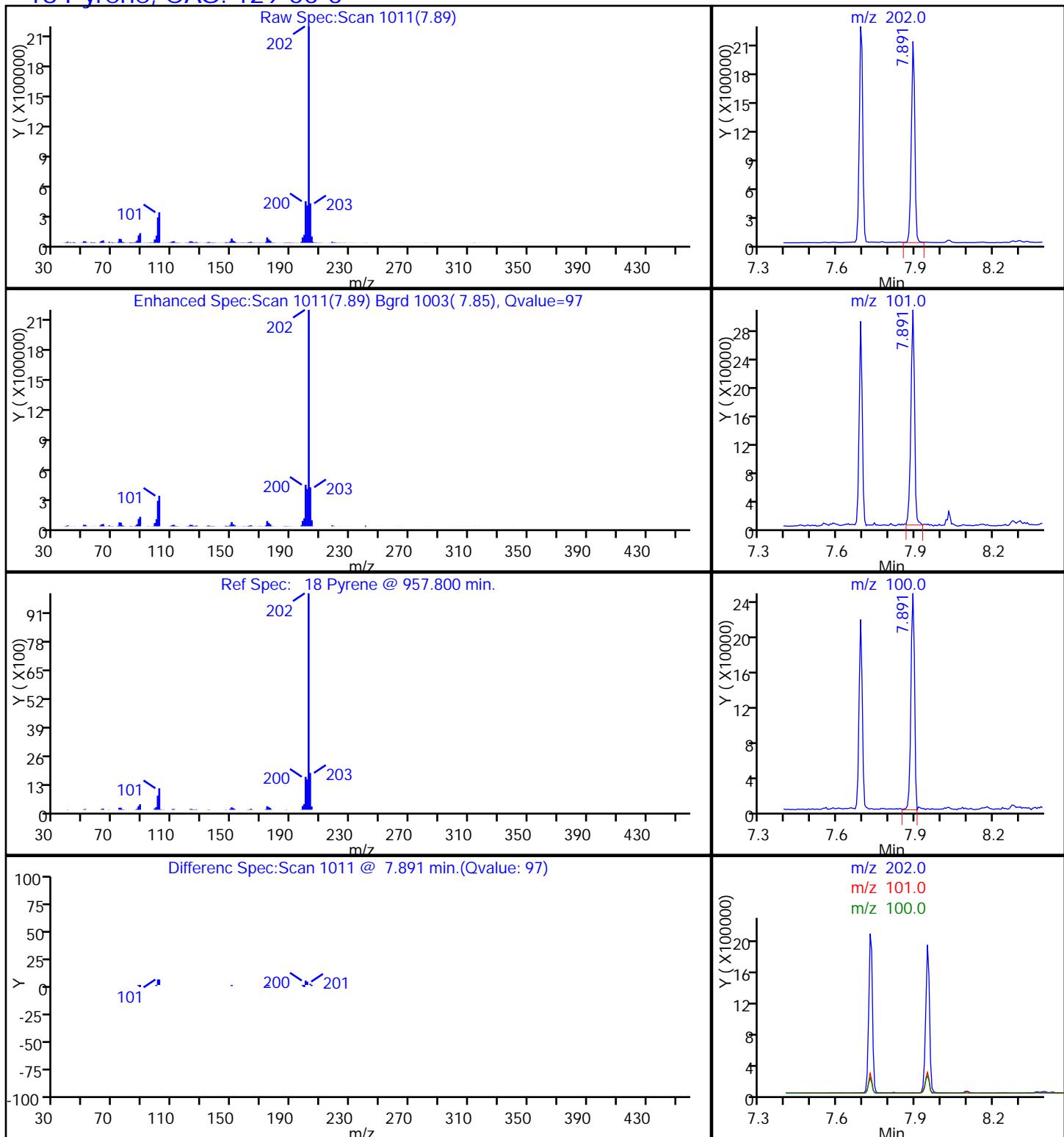


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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN



TestAmerica Savannah
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 Client ID: CV0244A-CS6"
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

18 Pyrene, CAS: 129-00-0



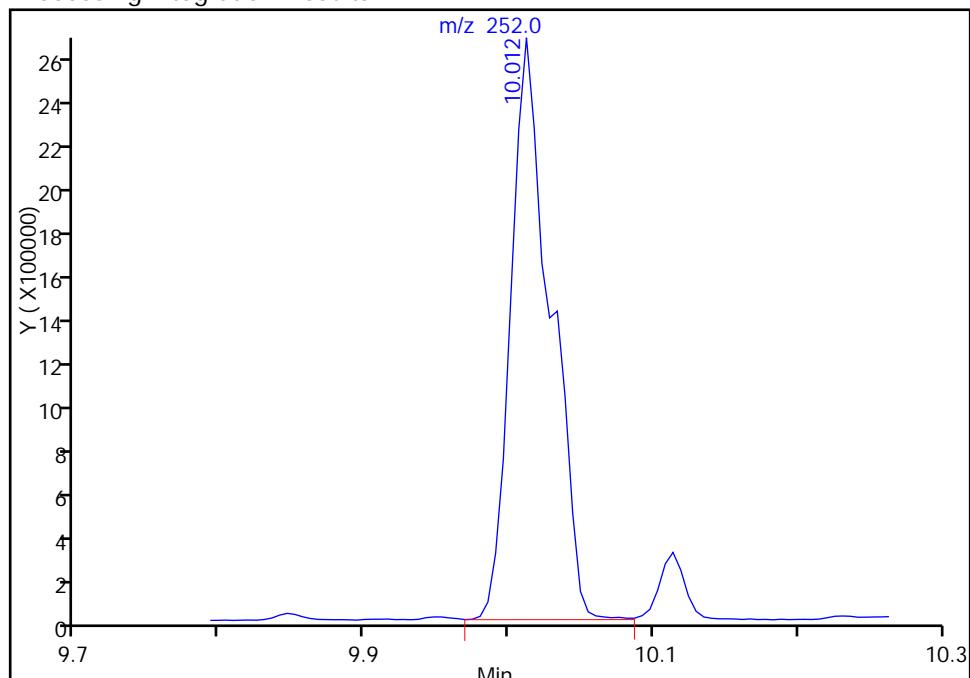
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 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

21 Benzo[b]fluoranthene, CAS: 205-99-2

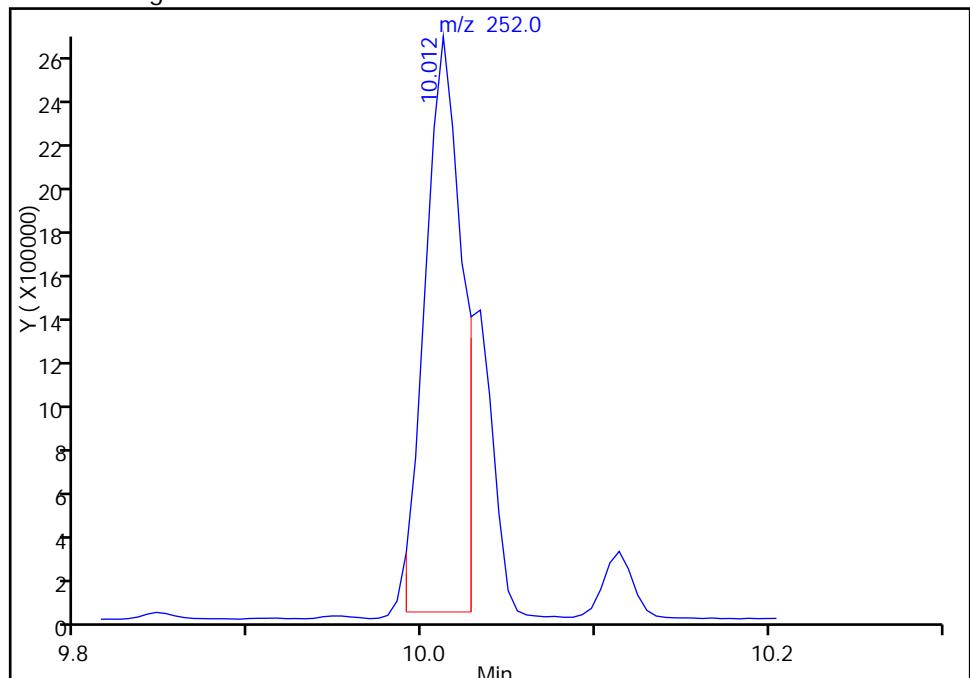
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 Amount: 14.504610

Processing Integration Results



RT: 10.01
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 Amount: 11.330008

Manual Integration Results



Reviewer: moorer, 19-Apr-2014 13:36:56

Audit Action: Manually Integrated

Audit Reason: Split Peak

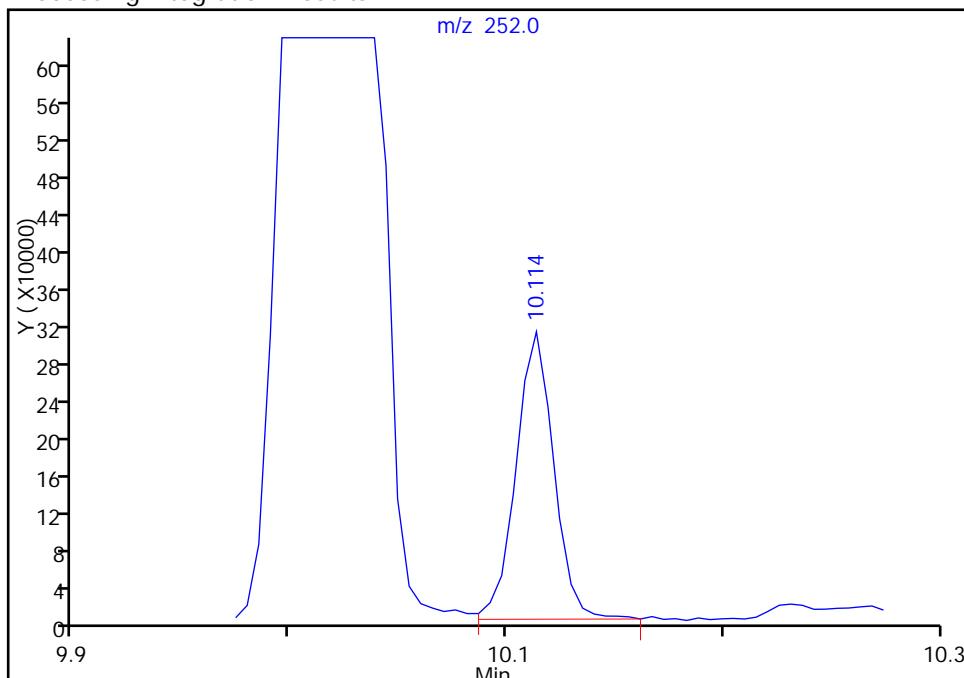
TestAmerica Savannah

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 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

22 Benzo[k]fluoranthene, CAS: 207-08-9

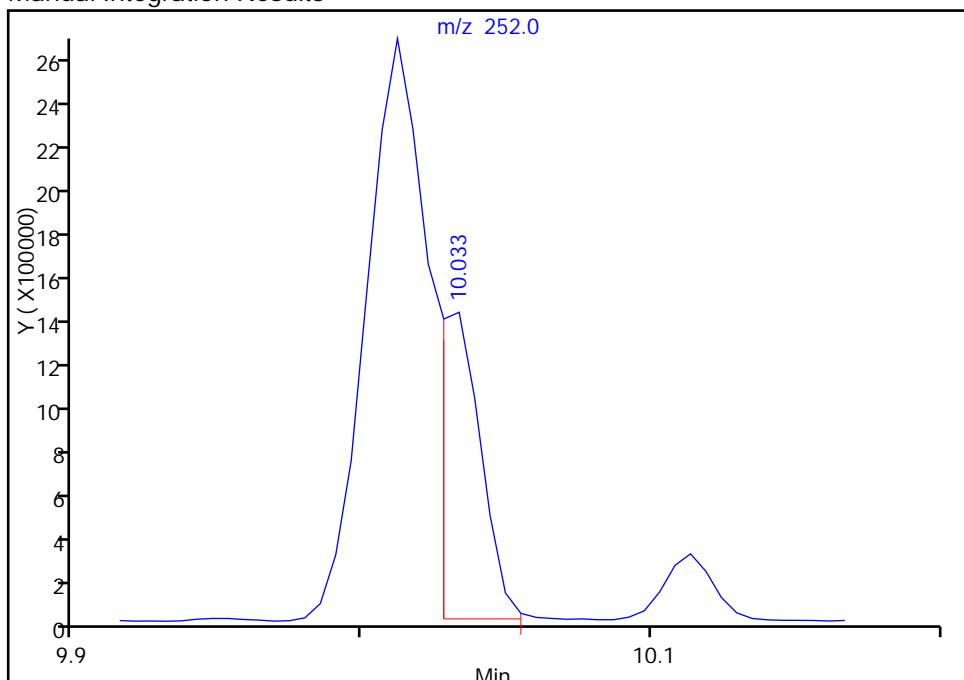
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Processing Integration Results



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Manual Integration Results



Reviewer: moorer, 19-Apr-2014 13:36:56

Audit Action: Manually Integrated

Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah	Job No.: 680-100443-1
SDG No.: 680-100443-01	
Client Sample ID: CV0244A-CS12"	Lab Sample ID: 680-100443-3
Matrix: Solid	Lab File ID: DD1818.D
Analysis Method: 8270D_LL_PAH	Date Collected: 04/12/2014 09:30
Extract. Method: 3546	Date Extracted: 04/16/2014 11:40
Sample wt/vol: 30.04(g)	Date Analyzed: 04/18/2014 17:54
Con. Extract Vol.: 1(mL)	Dilution Factor: 10
Injection Volume: 2(uL)	Level: (low/med) Low
% Moisture: 20.2	GPC Cleanup:(Y/N) N
Analysis Batch No.: 325086	Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	84	U	84	41
208-96-8	Acenaphthylene	53	J	84	41
120-12-7	Anthracene	80	J	84	41
56-55-3	Benzo[a]anthracene	560		84	41
50-32-8	Benzo[a]pyrene	630		84	15
205-99-2	Benzo[b]fluoranthene	950		84	41
191-24-2	Benzo[g,h,i]perylene	440		84	41
207-08-9	Benzo[k]fluoranthene	330		84	25
218-01-9	Chrysene	680		84	41
53-70-3	Dibenz(a,h)anthracene	120		84	41
206-44-0	Fluoranthene	820		84	41
86-73-7	Fluorene	84	U	84	41
193-39-5	Indeno[1,2,3-cd]pyrene	370		84	41
90-12-0	1-Methylnaphthalene	150		84	39
91-57-6	2-Methylnaphthalene	170		84	41
91-20-3	Naphthalene	120		84	41
85-01-8	Phenanthrene	420		84	30
129-00-0	Pyrene	760		84	41

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1818.D
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Sample Type: Client
 Inject. Date: 18-Apr-2014 17:54:30 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Sample Info: 100443-A-3-A; DL10
 Misc. Info.: 680-0008209-018
 Operator ID: Instrument ID: CMSD
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 19-Apr-2014 13:40:03 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: moorer Date: 19-Apr-2014 13:40:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.923	3.920	0.003	99	647302	2.00	
* 2 Acenaphthene-d10	164	5.408	5.405	0.003	92	349749	2.00	
* 3 Phenanthrene-d10	188	6.648	6.645	0.003	98	567667	2.00	
* 4 Chrysene-d12	240	8.987	8.990	-0.003	97	567088	2.00	
* 5 Perylene-d12	264	10.430	10.427	0.003	98	458104	2.00	
7 Naphthalene	128	3.939	3.936	0.003	94	93781	0.2813	
9 2-Methylnaphthalene	142	4.527	4.519	0.008	81	85418	0.3988	
8 1-Methylnaphthalene	142	4.607	4.604	0.003	75	77747	0.3517	
11 Acenaphthylene	152	5.291	5.283	0.008	95	38369	0.1279	
15 Phenanthrene	178	6.669	6.666	0.003	97	322938	1.02	
16 Anthracene	178	6.712	6.709	0.003	92	52855	0.1926	
17 Fluoranthene	202	7.689	7.687	0.003	98	669212	1.97	
18 Pyrene	202	7.892	7.890	0.002	97	622284	1.82	
19 Benzo[a]anthracene	228	8.982	8.979	0.003	99	387024	1.33	
20 Chrysene	228	9.014	9.011	0.003	95	471874	1.63	
21 Benzo[b]fluoranthene	252	10.008	10.005	0.003	97	656270	2.27	M
22 Benzo[k]fluoranthene	252	10.024	10.032	-0.008	94	232288	0.8019	M
23 Benzo[a]pyrene	252	10.360	10.360	-0.003	87	361178	1.51	
24 Indeno[1,2,3-cd]pyrene	276	11.867	11.869	-0.002	97	238215	0.8914	
25 Dibenz(a,h)anthracene	278	11.883	11.896	-0.013	59	65646	0.2834	
26 Benzo[g,h,i]perylene	276	12.300	12.307	-0.007	92	253080	1.06	

QC Flag Legend

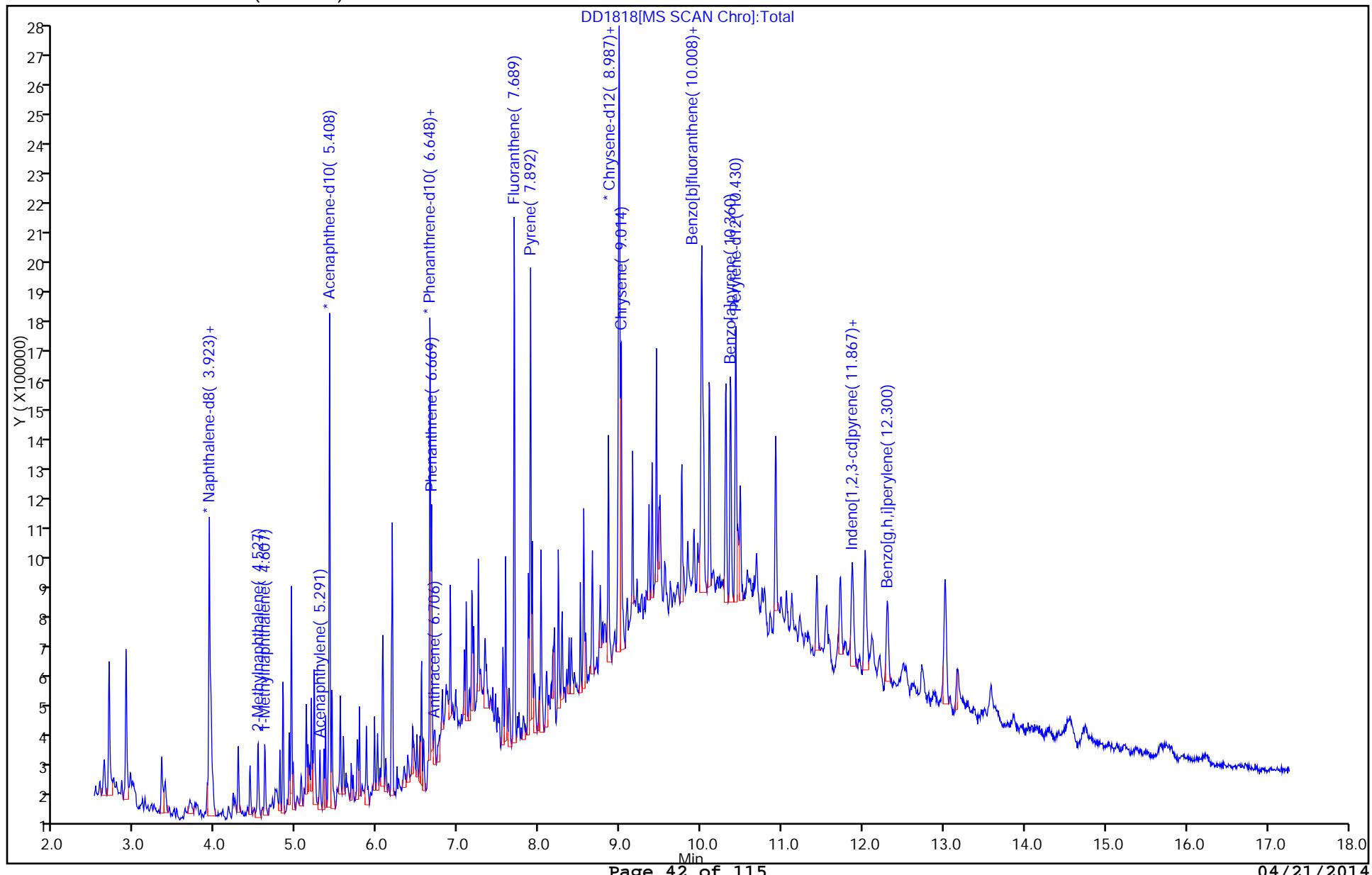
Review Flags

M - Manually Integrated

Report Date: 19-Apr-2014 13:40:04

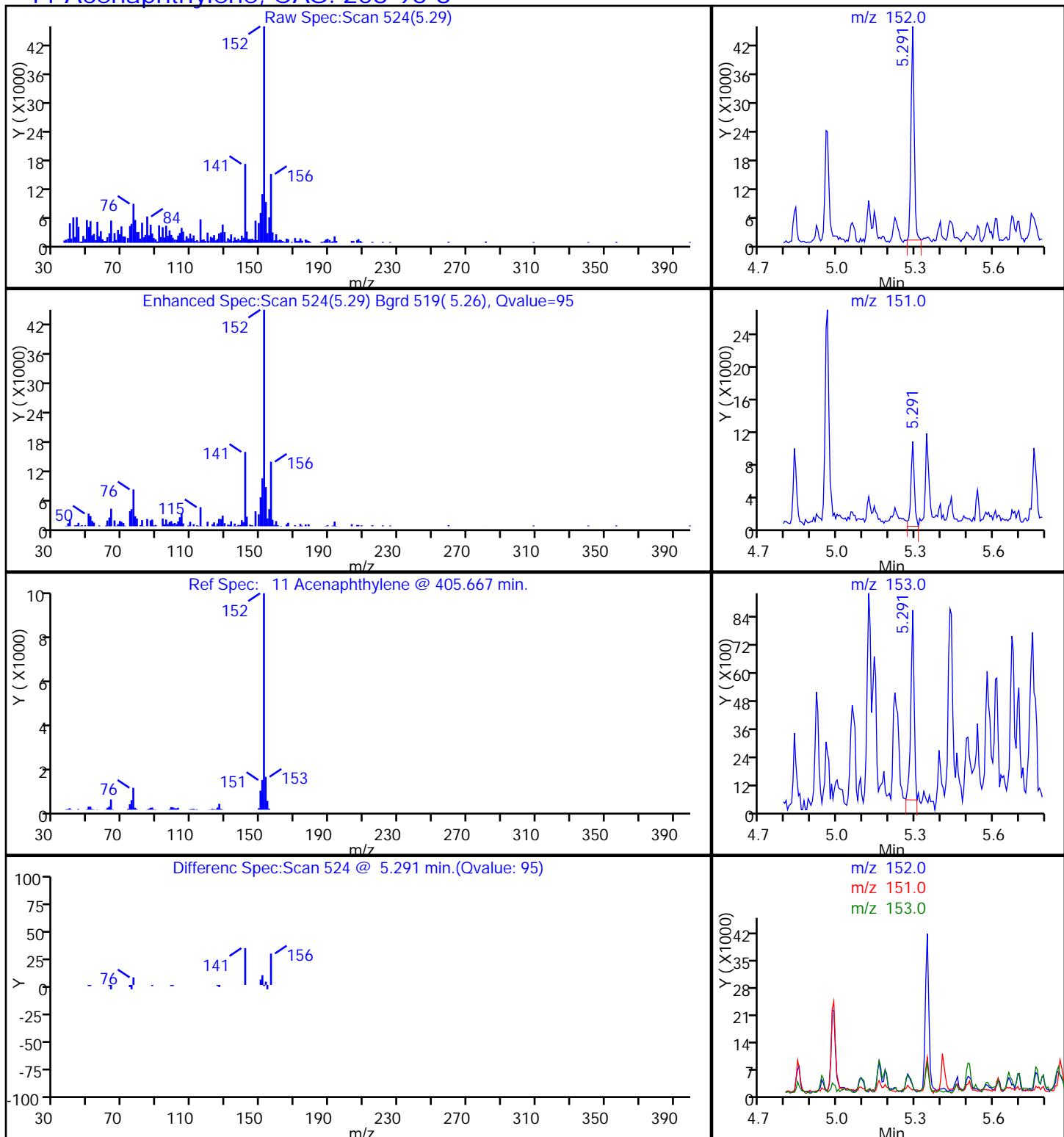
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 Client ID: CV0244A-CS12" Operator ID:
 Injection Vol: 2.0 ul Dil. Factor: 10.0000 Worklist Smp#: 18
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)



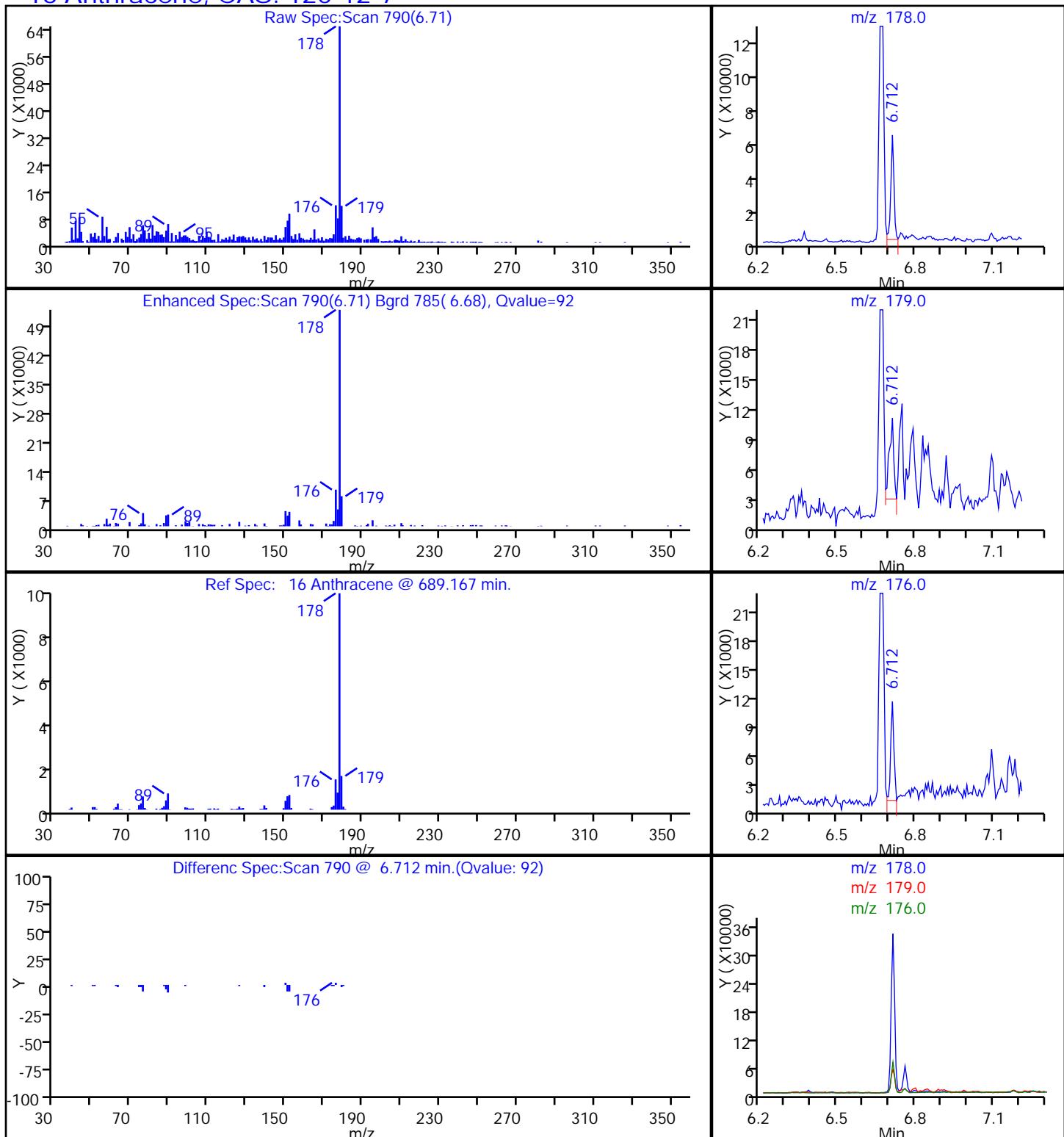
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 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

11 Acenaphthylene, CAS: 208-96-8

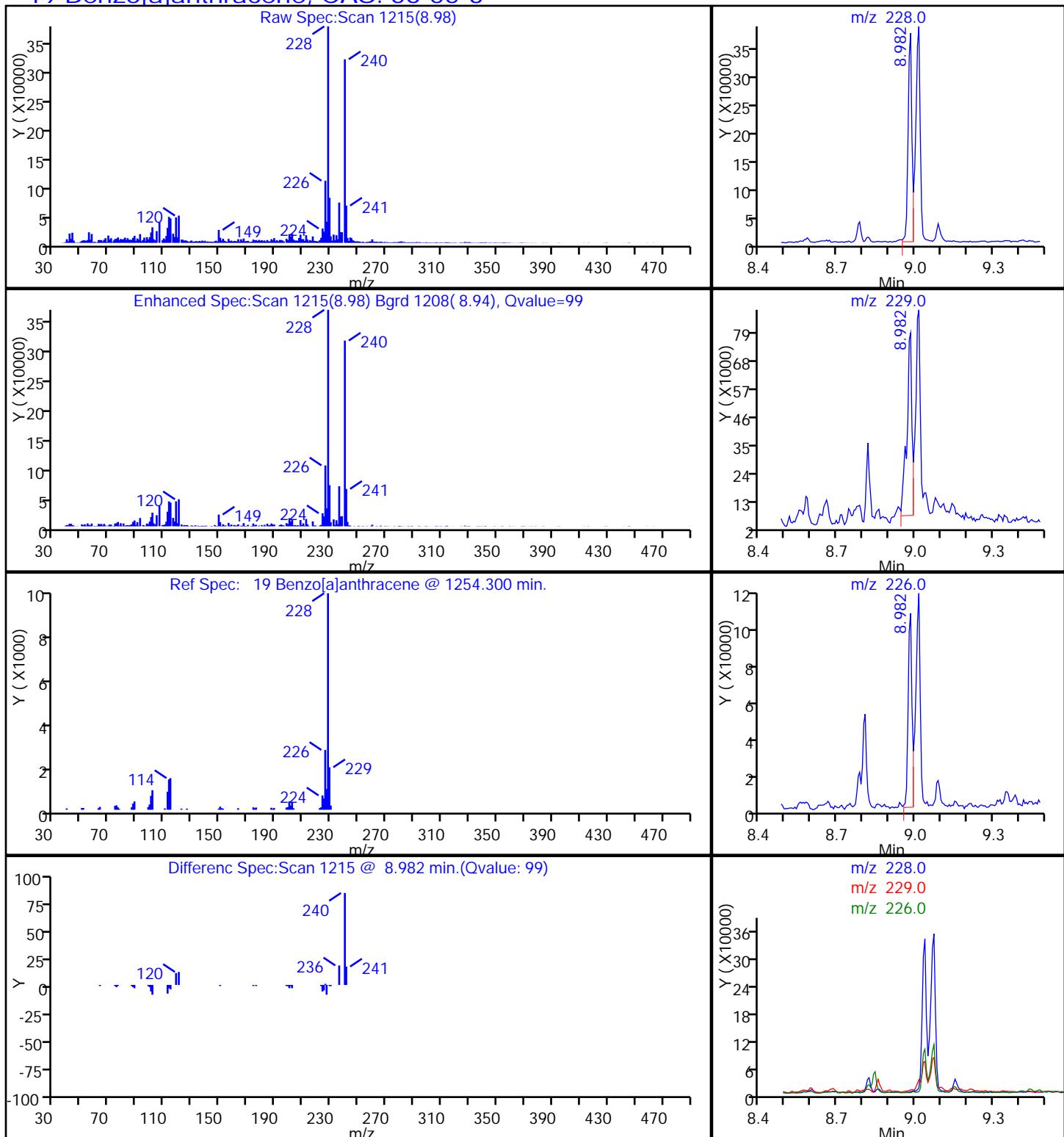


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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
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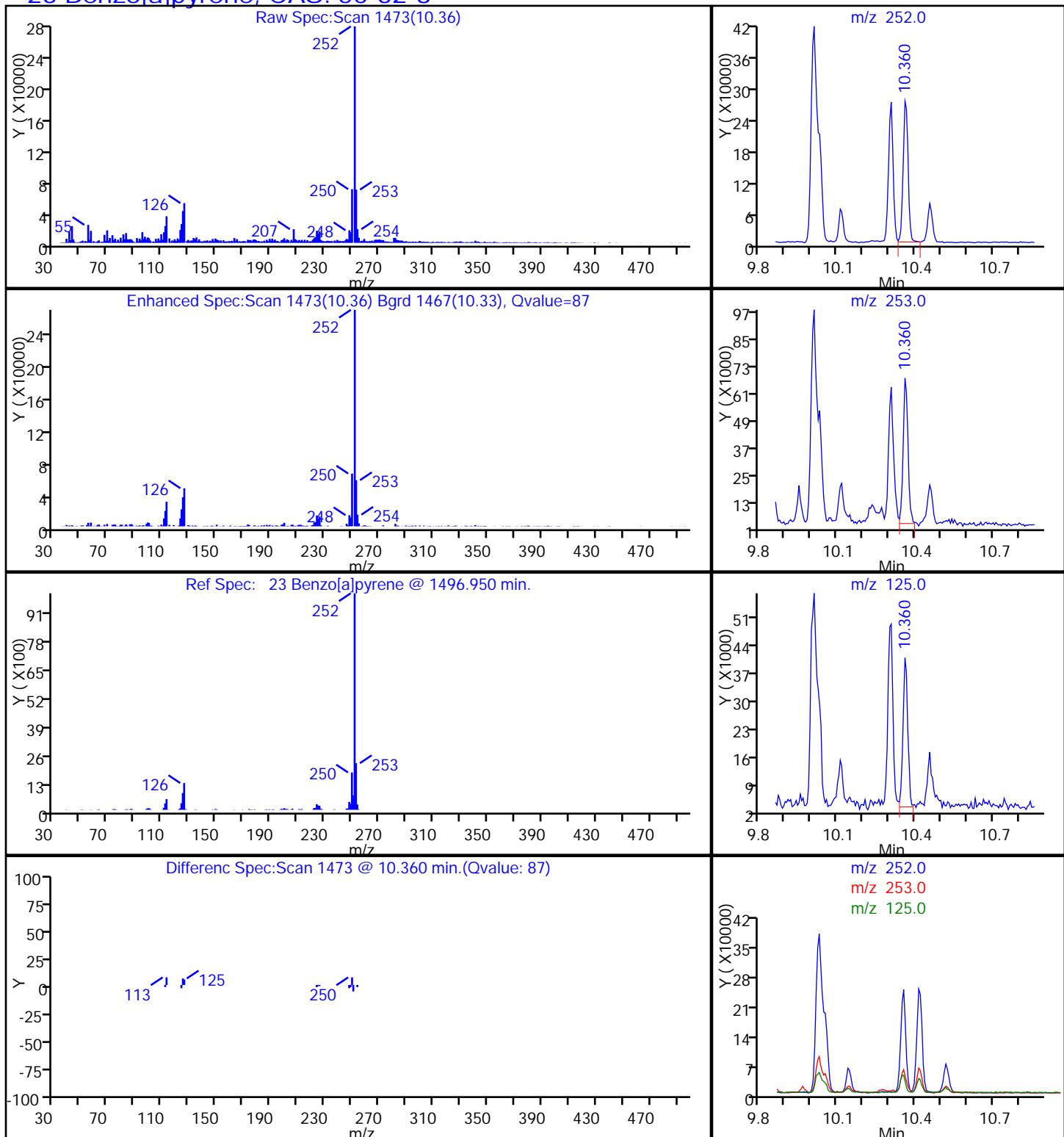
16 Anthracene, CAS: 120-12-7



TestAmerica Savannah
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 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

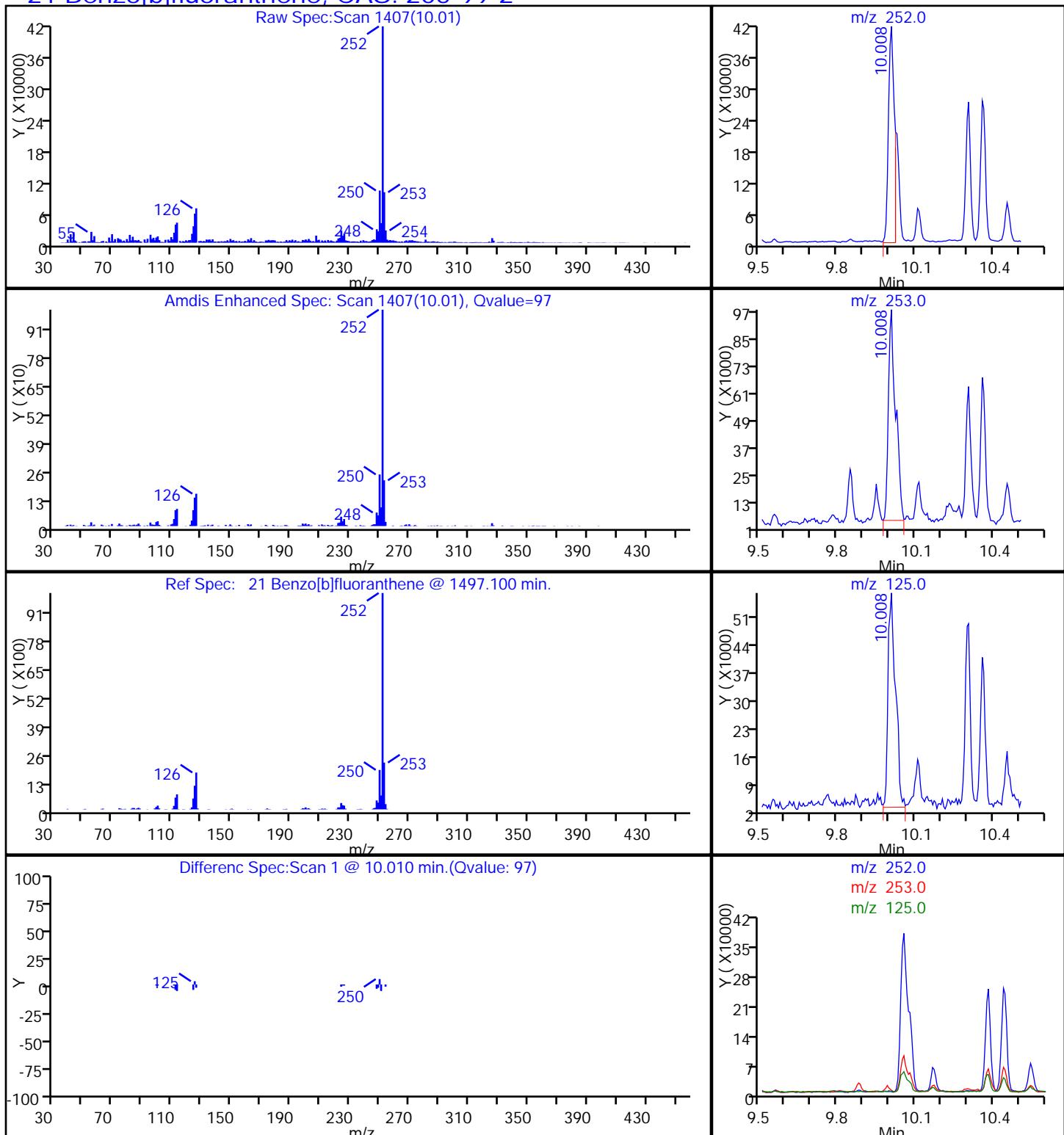
19 Benzo[a]anthracene, CAS: 56-55-3

TestAmerica Savannah
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 Client ID: CV0244A-CS12"
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

23 Benzo[a]pyrene, CAS: 50-32-8

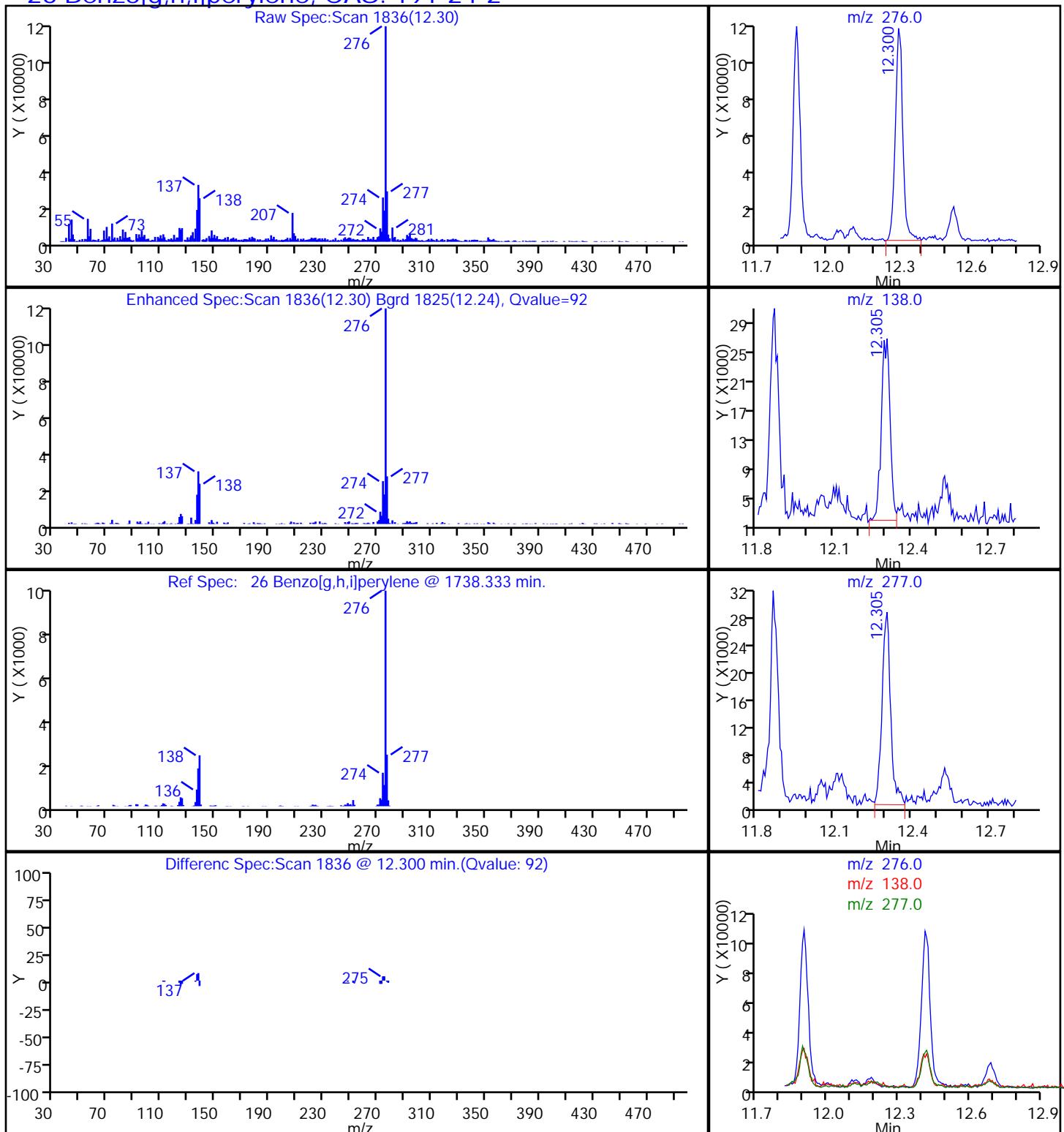
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

21 Benzo[b]fluoranthene, CAS: 205-99-2



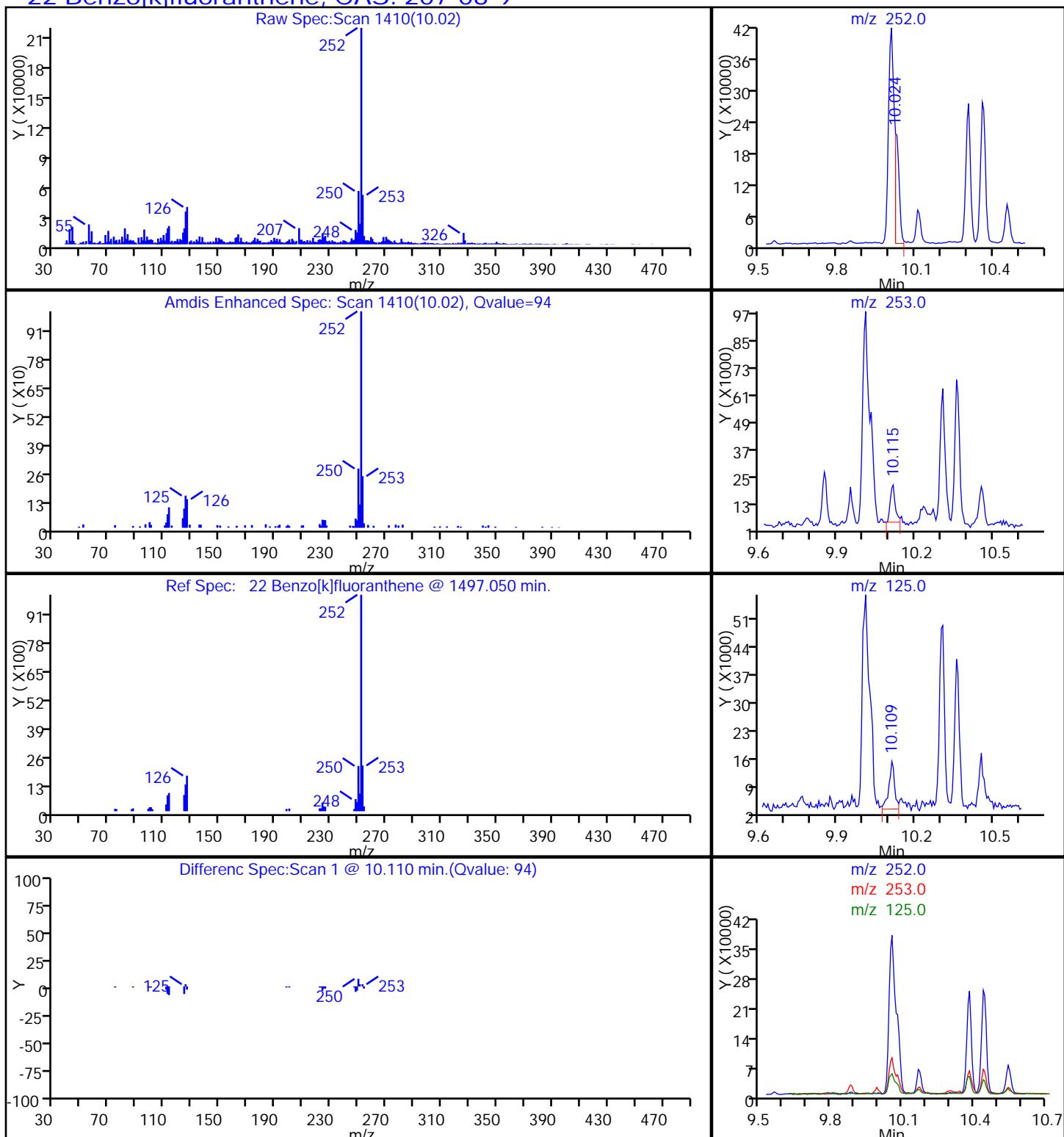
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26 Benzo[g,h,i]perylene, CAS: 191-24-2



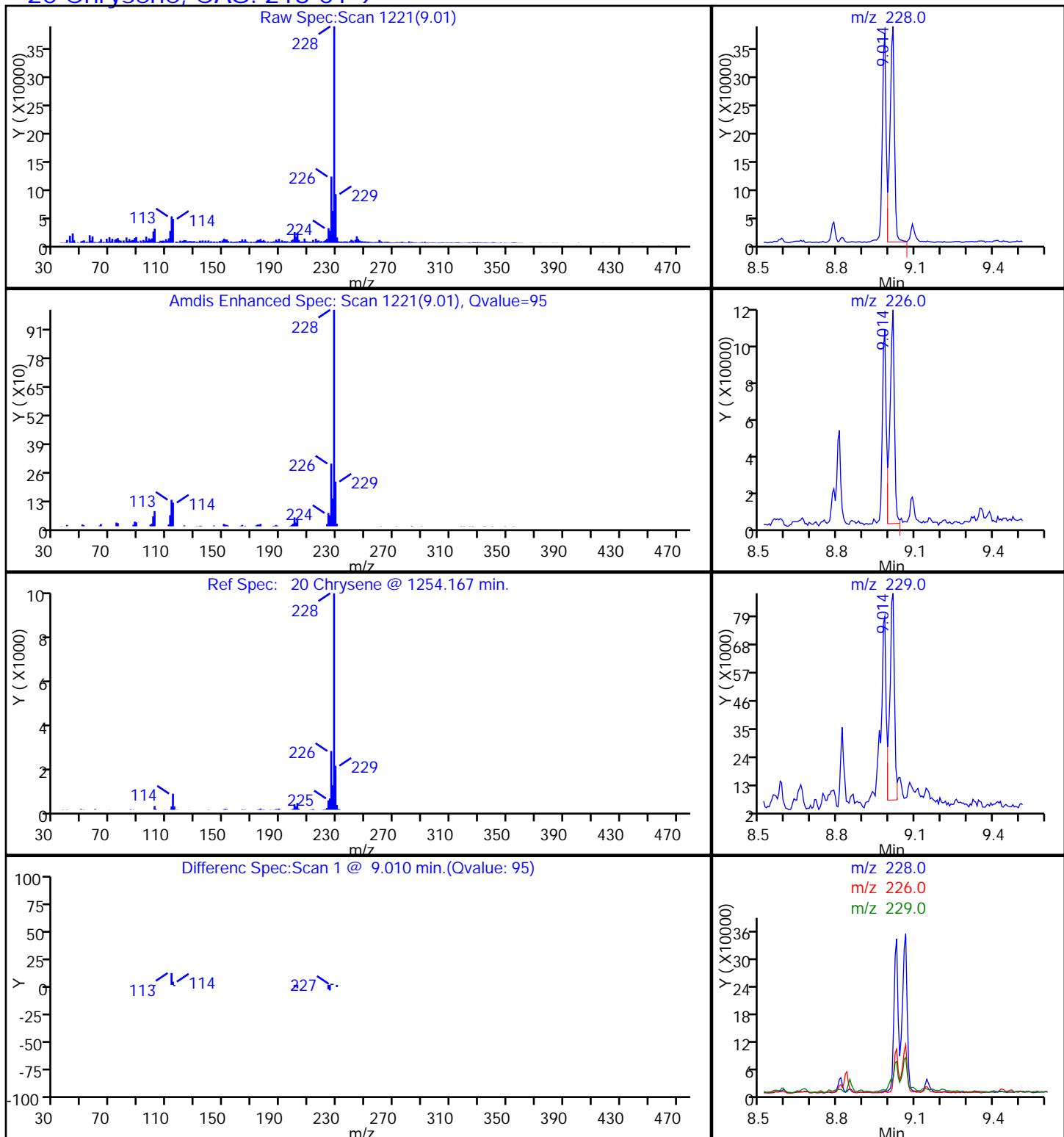
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector MS SCAN

22 Benzo[k]fluoranthene, CAS: 207-08-9



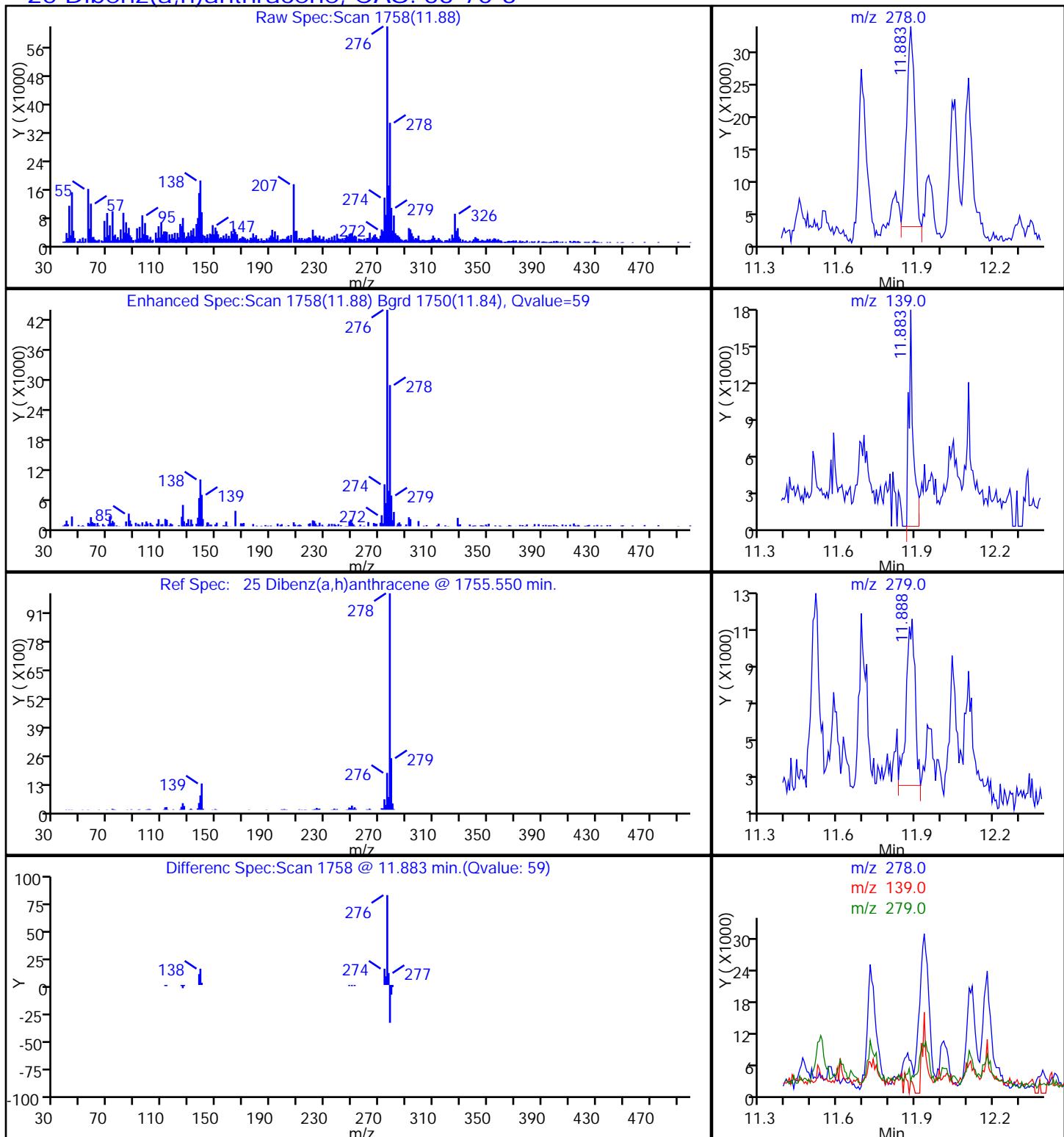
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 Injection Vol: 2.0 ul Dil. Factor: 10.0000
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 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

20 Chrysene, CAS: 218-01-9

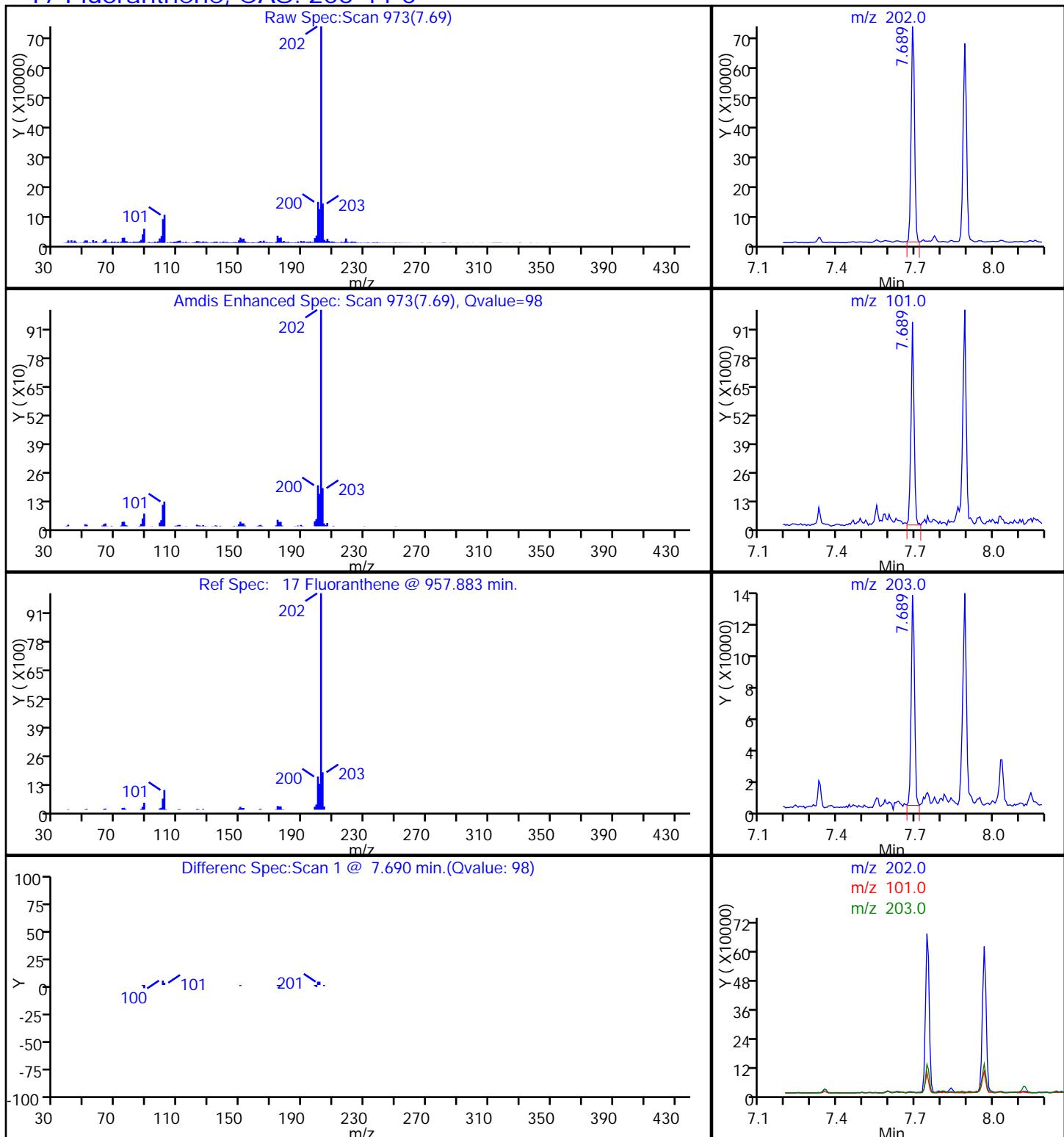


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 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector MS SCAN

25 Dibenz(a,h)anthracene, CAS: 53-70-3

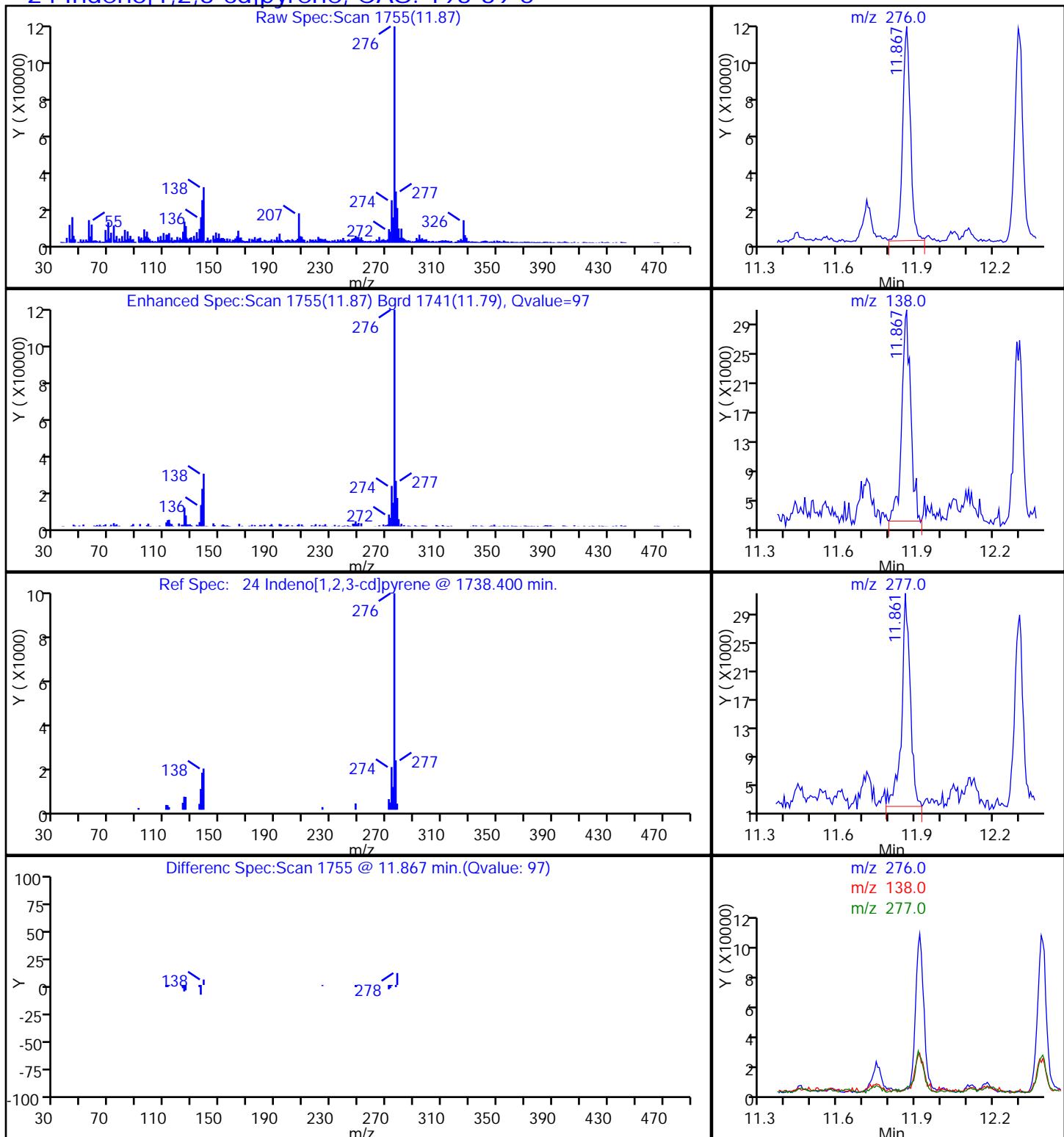


TestAmerica Savannah
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 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
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 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

17 Fluoranthene, CAS: 206-44-0

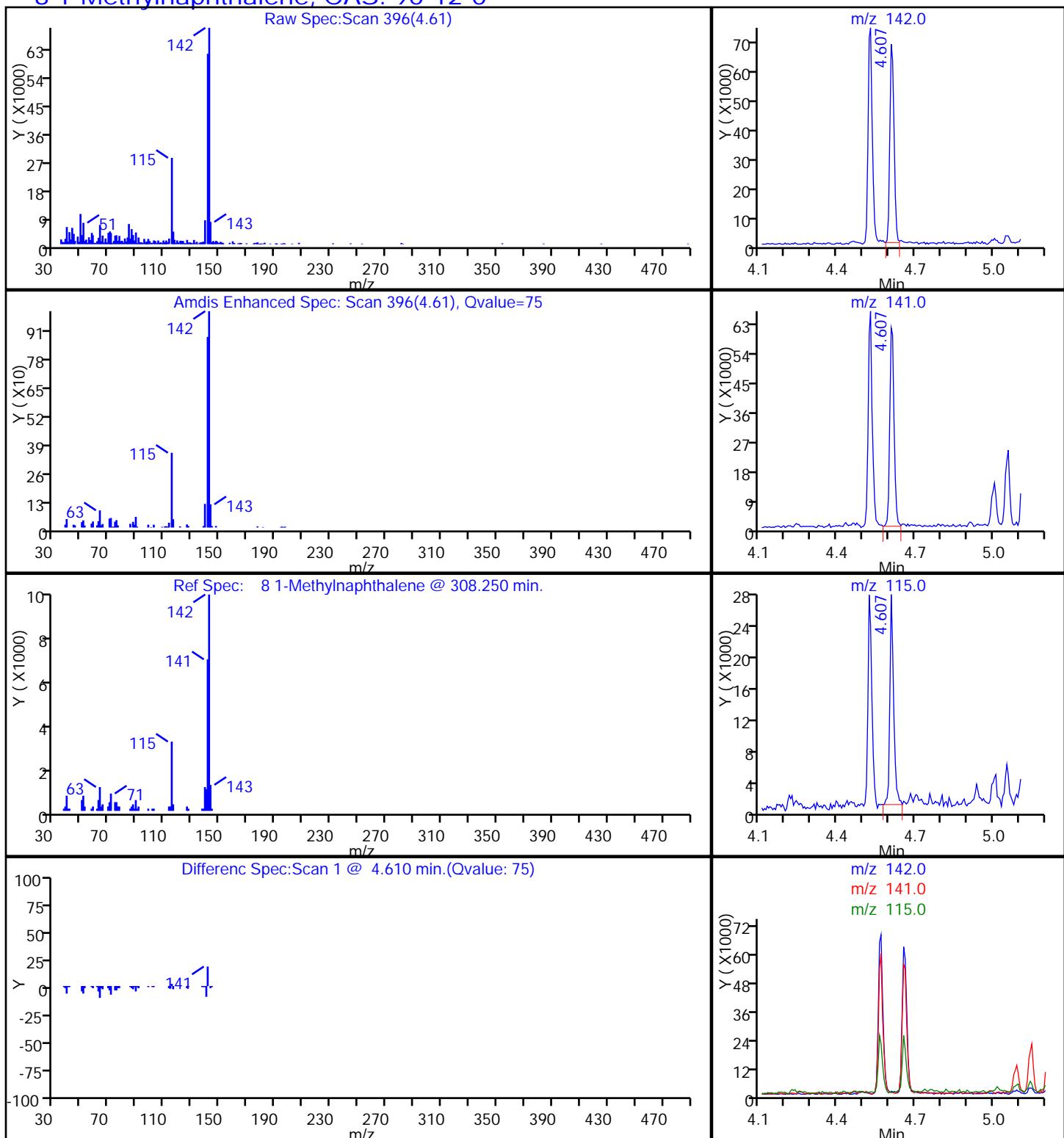
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 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector MS SCAN

24 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



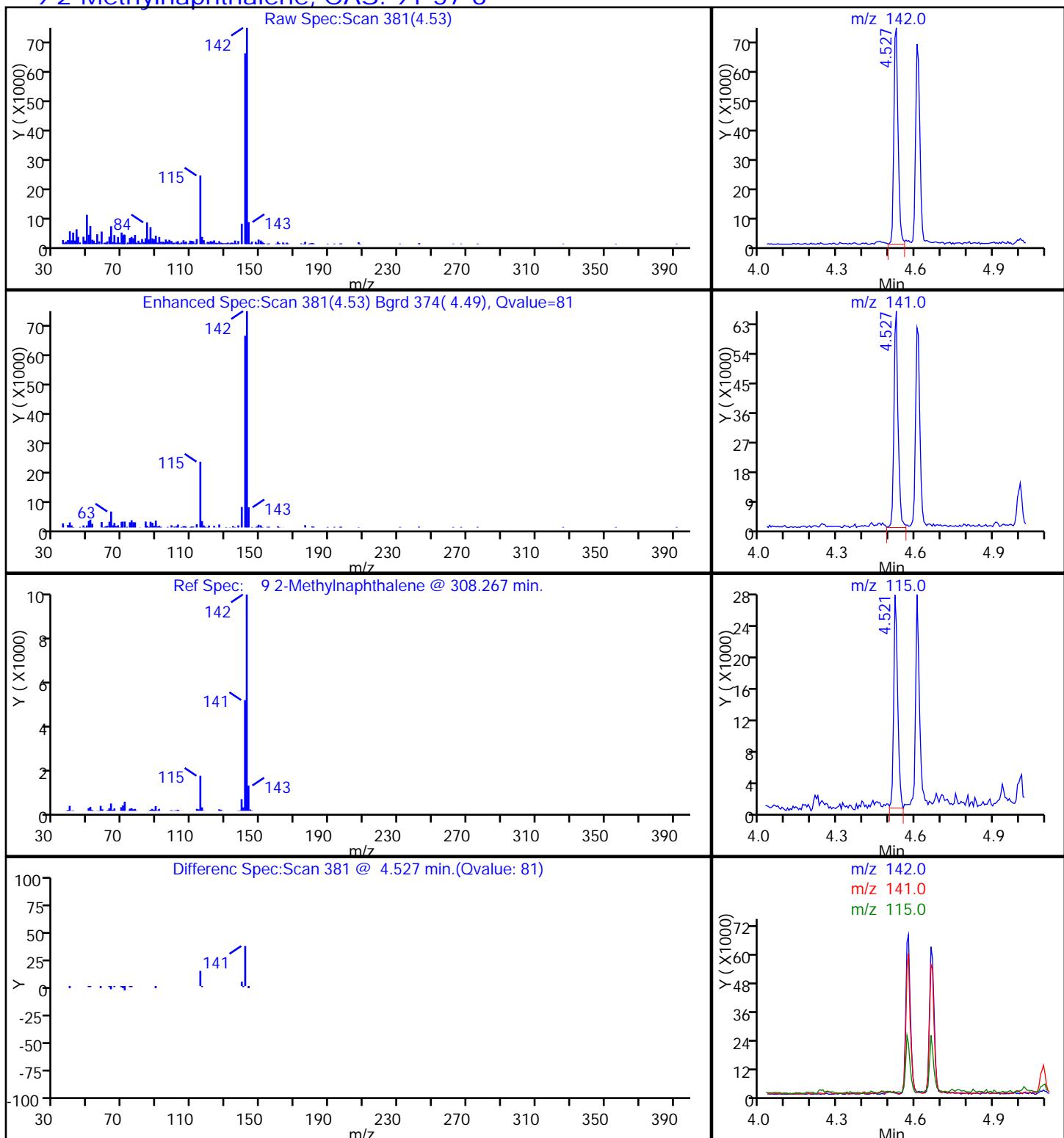
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 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

8 1-Methylnaphthalene, CAS: 90-12-0



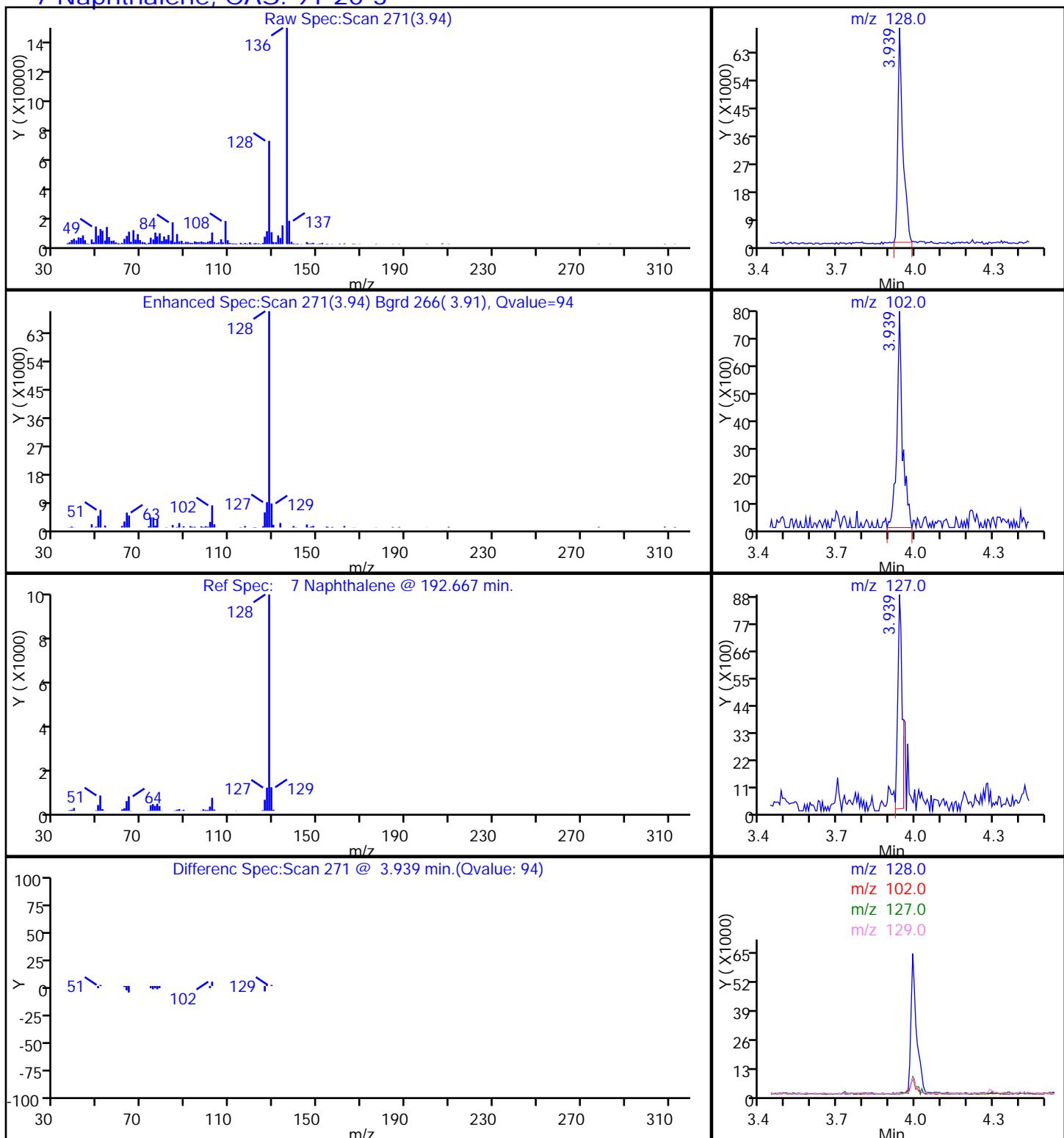
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 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

9 2-Methylnaphthalene, CAS: 91-57-6



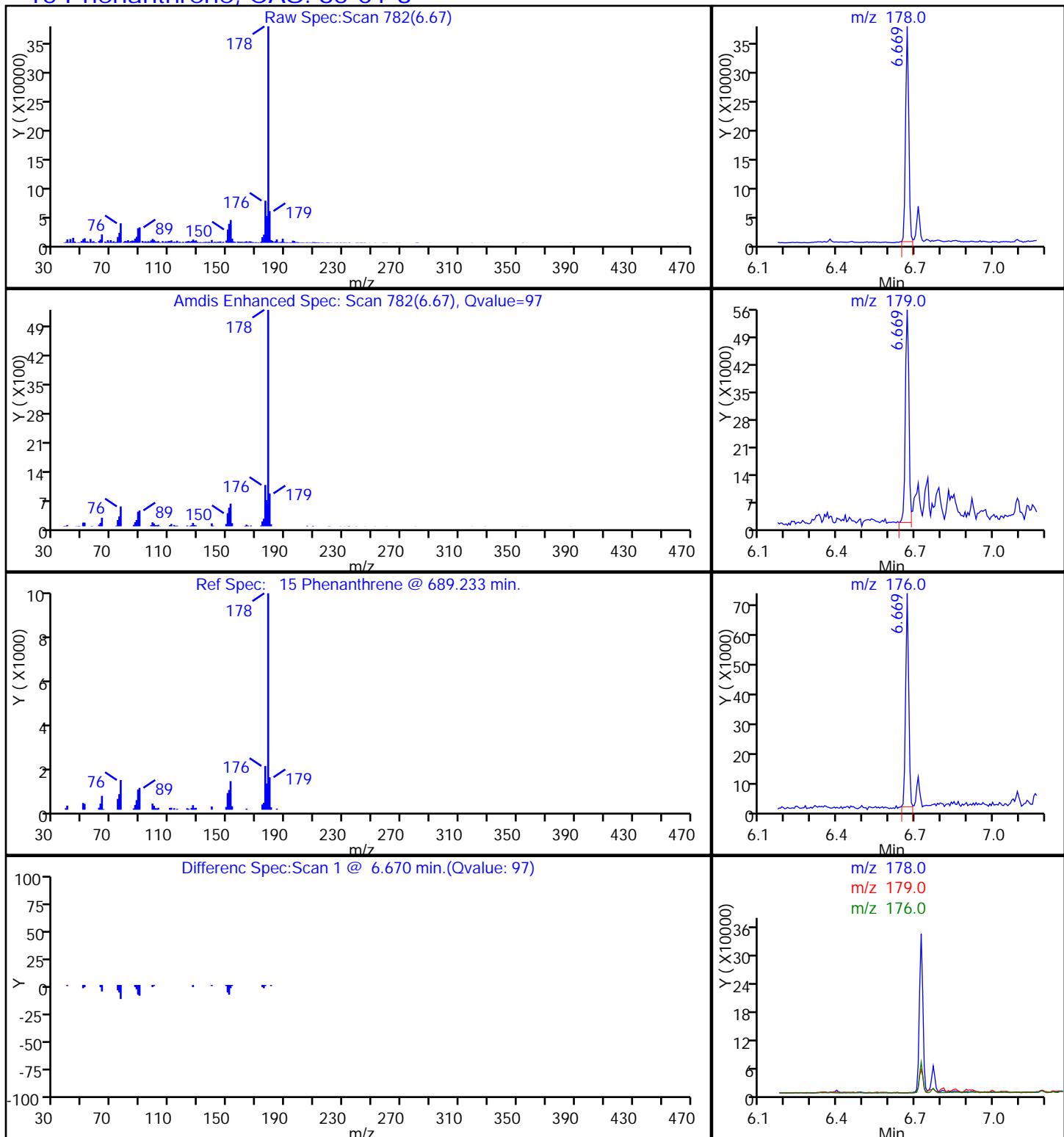
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 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

7 Naphthalene, CAS: 91-20-3



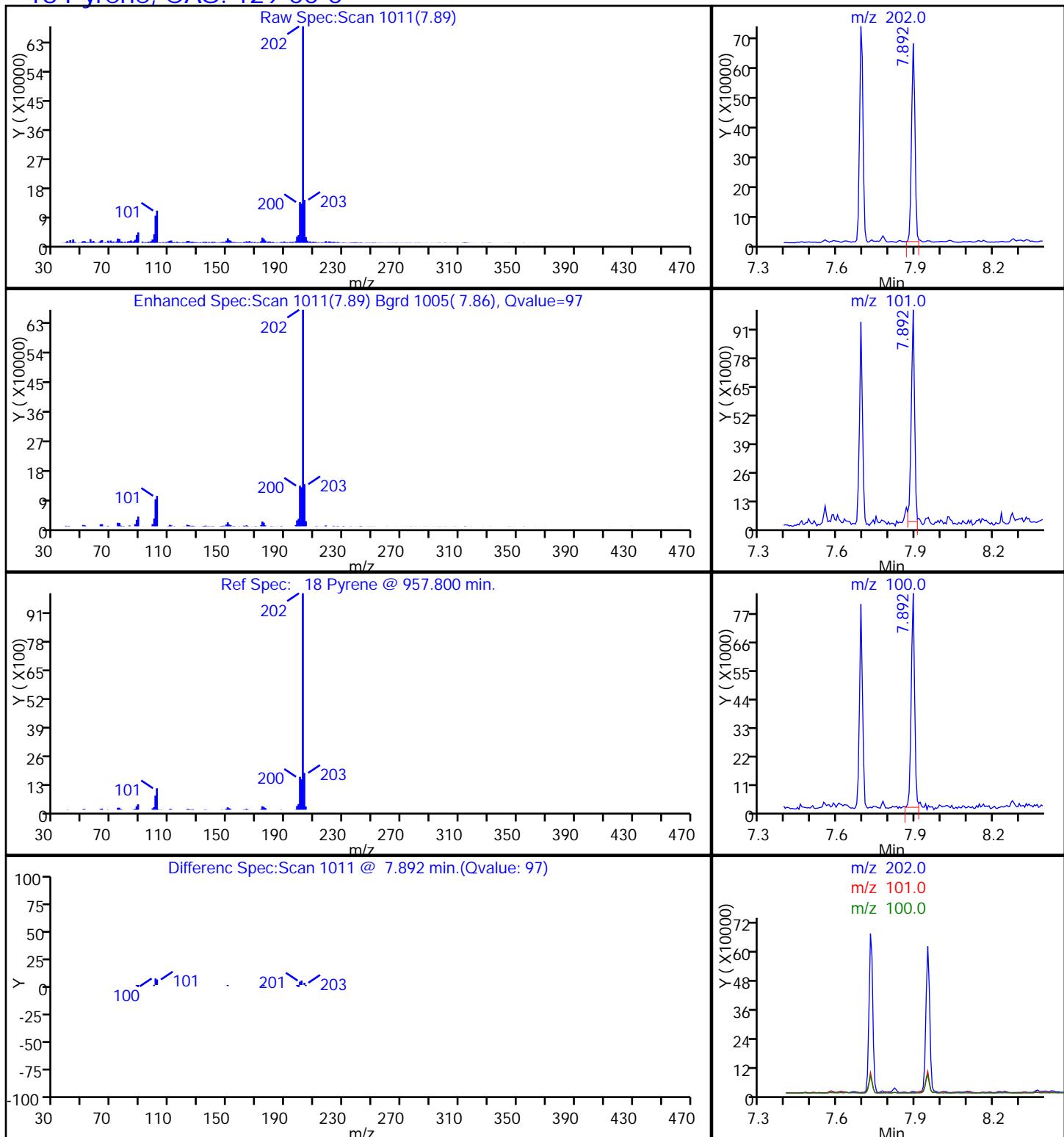
TestAmerica Savannah
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 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

15 Phenanthrene, CAS: 85-01-8



TestAmerica Savannah
 Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1818.D
 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

18 Pyrene, CAS: 129-00-0



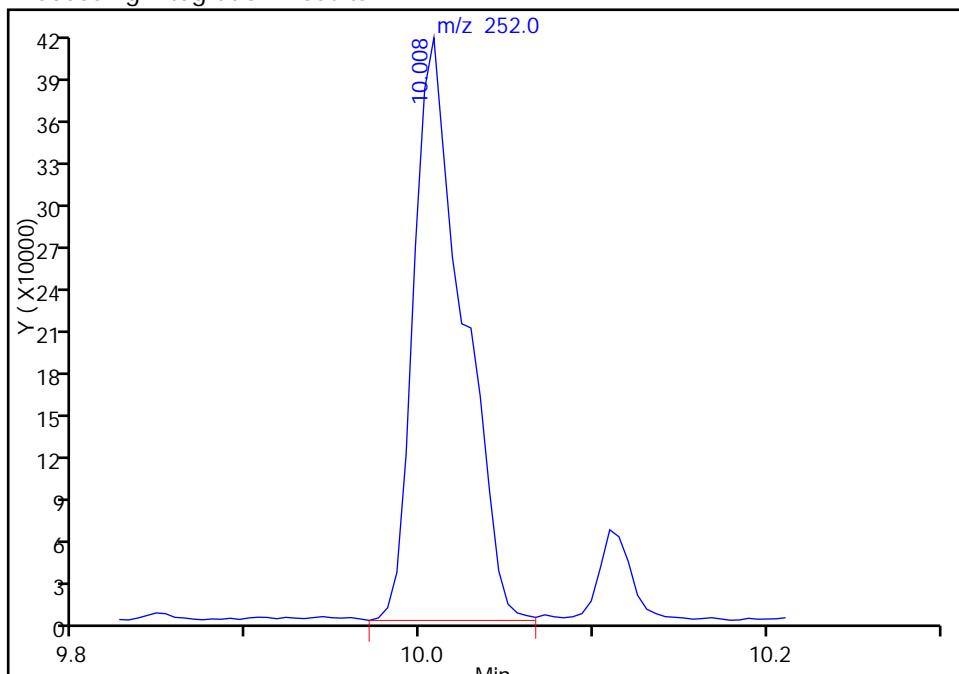
TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1818.D
 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

21 Benzo[b]fluoranthene, CAS: 205-99-2

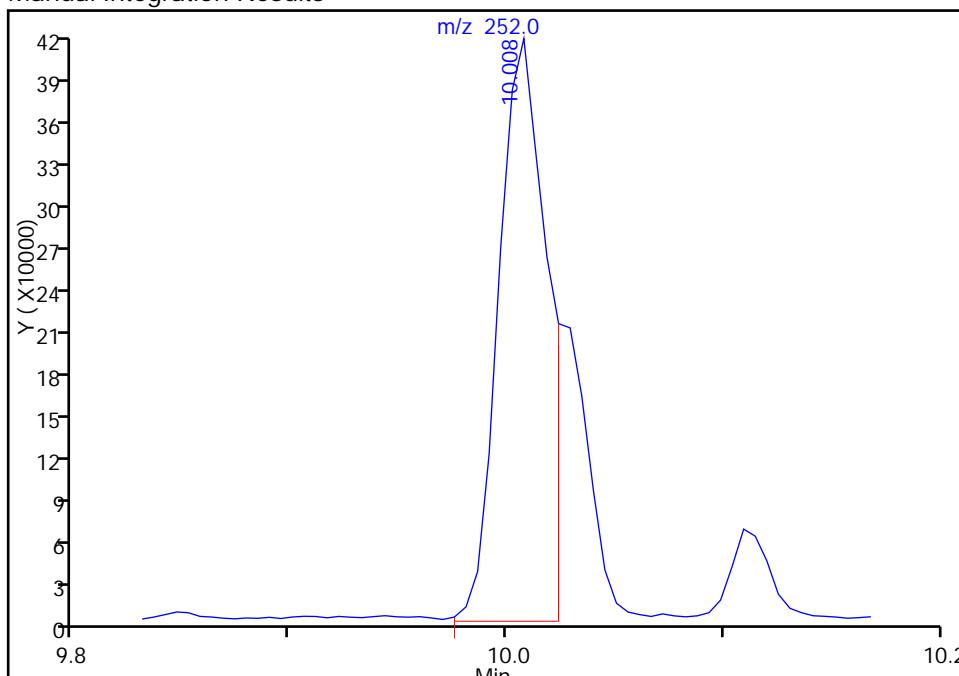
RT: 10.01
 Response: 819068
 Amount: 2.833040

Processing Integration Results



RT: 10.01
 Response: 656270
 Amount: 2.269945

Manual Integration Results



Reviewer: moorer, 19-Apr-2014 13:40:03

Audit Action: Manually Integrated

Audit Reason: Split Peak

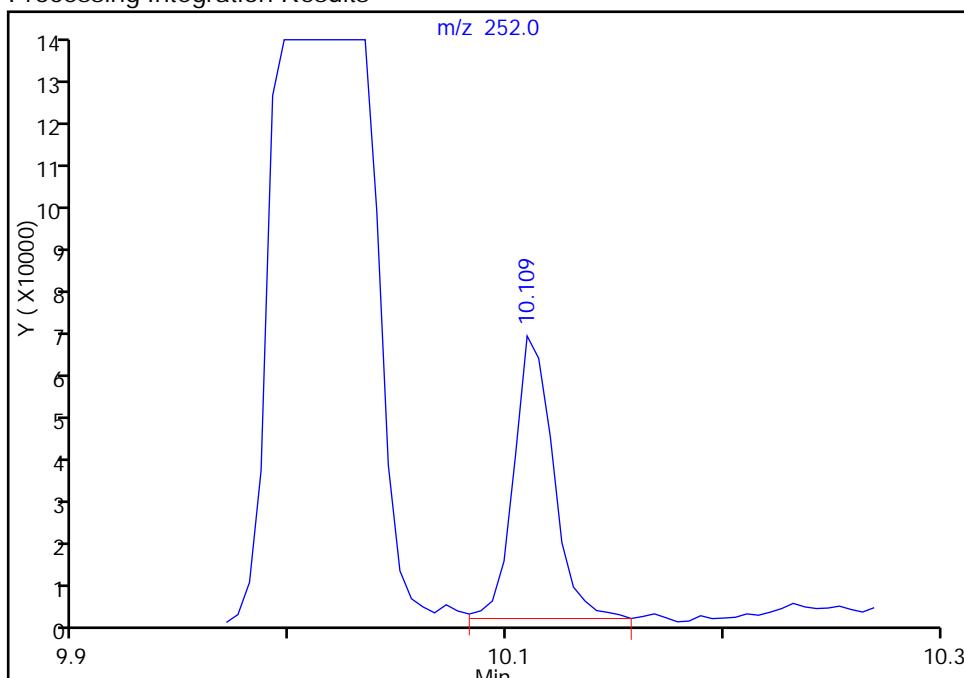
TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1818.D
 Injection Date: 18-Apr-2014 17:54:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-3-A Lab Sample ID: 680-100443-3
 Client ID: CV0244A-CS12"
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

22 Benzo[k]fluoranthene, CAS: 207-08-9

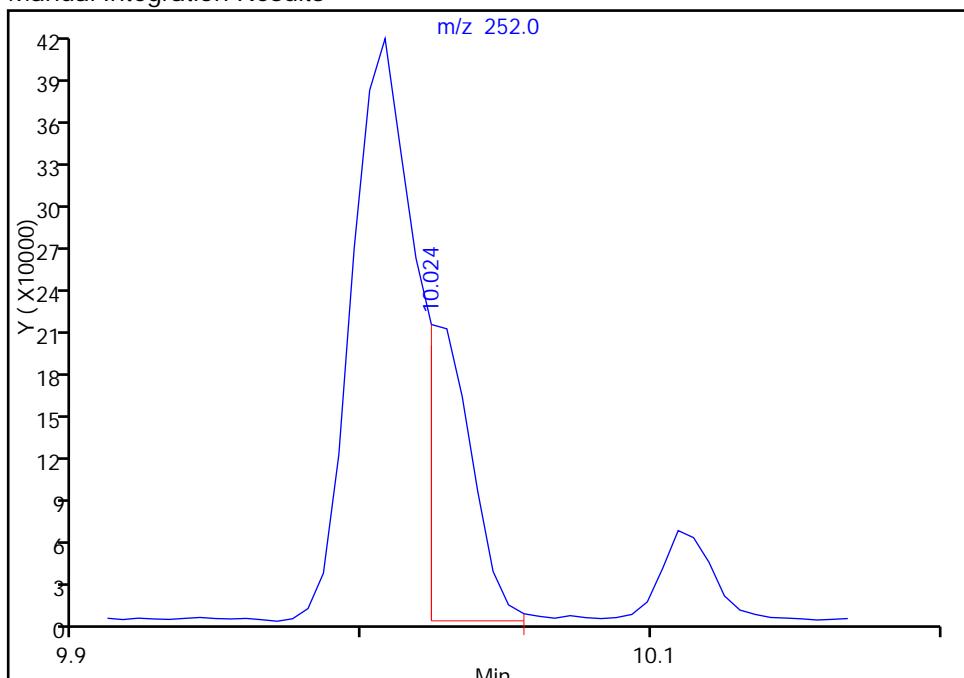
RT: 10.11
 Response: 81028
 Amount: 0.279736

Processing Integration Results



RT: 10.02
 Response: 232288
 Amount: 0.801938

Manual Integration Results



Reviewer: moorer, 19-Apr-2014 13:40:03

Audit Action: Manually Integrated

Audit Reason: Split Peak

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

Analy Batch No.: 325086

SDG No.: 680-100443-01

Instrument ID: CMSD GC Column: RXi- 5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/18/2014 11:34 Calibration End Date: 04/18/2014 13:52 Calibration ID: 28451

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-325086/3	DD1803.D
Level 2	IC 680-325086/8	DD1808.D
Level 3	IC 680-325086/7	DD1807.D
Level 4	IC 680-325086/6	DD1806.D
Level 5	ICIS 680-325086/2	DD1802.D
Level 6	IC 680-325086/5	DD1805.D
Level 7	IC 680-325086/4	DD1804.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Naphthalene	0.9804 1.1189	0.9076 1.1414	1.0110	0.9916	1.0592	Ave		1.0300			0.7000	8.0		20.0			
2-Methylnaphthalene	0.6223 0.7433	0.5824 0.7510	0.6290	0.6321	0.6721	Ave		0.6617			0.4000	9.7		20.0			
1-Methylnaphthalene	0.6576 0.7496	0.6185 0.7731	0.6401	0.6545	0.6872	Ave		0.6829					8.5		20.0		
1,1'-Biphenyl	1.2858 1.6304	2.3625 1.6702	1.4519	1.3472	1.4949	QuaF		1.5288	0.0072						1.0000		0.9900
Acenaphthylene	1.4711 2.0006	1.3870 2.0594	1.6580	1.5993	1.8295	Ave		1.7150			0.9000	15.0		20.0			
Acenaphthene	1.0836 1.2676	0.9994 1.3079	1.1220	1.0742	1.1595	Ave		1.1449			0.9000	9.6		20.0			
Dibenzofuran	1.4099 1.7566	2.8407 1.7436	1.5116	1.4594	1.5682	QuaF		1.6678	0.0040						0.9990		0.9900
Fluorene	1.0919 1.4541	1.0475 1.4649	1.2191	1.1801	1.3121	Ave		1.2528			0.9000	13.0		20.0			
Phenanthrene	1.0821 1.2068	0.9454 1.2831	1.0974	1.0805	1.1314	Ave		1.1181			0.7000	9.5		20.0			
Anthracene	0.8995 1.1149	0.7868 1.1634	0.9070	0.8988	0.9973	Ave		0.9668			0.7000	14.0		20.0			
Fluoranthene	1.0386 1.3829	0.9956 1.4674	1.1112	1.1411	1.2444	Ave		1.1973			0.6000	15.0		20.0			
Pyrene	1.2102 1.2845	1.0257 1.4034	1.1472	1.1464	1.2165	Ave		1.2048			0.6000	9.9		20.0			
Benzo[a]anthracene	0.9521 1.1412	0.9126 1.1717	0.9760	0.9511	1.0634	Ave		1.0240			0.7000	10.0		20.0			
Chrysene	0.9389 1.1155	0.9452 1.1391	0.9908	0.9780	1.0239	Ave		1.0188			0.7000	7.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-100443-1 Analy Batch No.: 325086

SDG No.: 680-100443-01

Instrument ID: CMSD GC Column: RXi- 5Sil MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/18/2014 11:34 Calibration End Date: 04/18/2014 13:52 Calibration ID: 28451

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzo[b]fluoranthene	1.0914 1.4576	1.0687 1.4887	1.2910	1.2304	1.2076	Ave		1.2622			0.4000	13.0		20.0			
Benzo[k]fluoranthene	1.1203 1.3940	1.0912 1.4651	1.1668	1.2237	1.3909	Ave		1.2646			0.4000	12.0		20.0			
Benzo[a]pyrene	0.8534 1.2260	0.8919 1.2530	1.0176	0.9945	1.0843	Ave		1.0458			0.4000	15.0		20.0			
Indeno[1,2,3-cd]pyrene	0.9005 1.0575	0.8218 1.0598	0.9184	0.9163	0.9231	Ave		0.9425			0.2000	9.2		20.0			
Dibenz(a,h)anthracene	0.9997 1.1560	0.8148 1.1754	0.9721	0.9771	0.9843	Ave		1.0113			0.2000	12.0		20.0			
Benzo[g,h,i]perylene	1.1159 1.1371	0.8696 1.1369	1.0274	1.0404	0.9990	Ave		1.0466			0.2000	9.2		20.0			
o-Terphenyl	0.6529 0.6599	0.5632 0.7435	0.6532	0.6009	0.6318	Ave		0.6436				8.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

Analy Batch No.: 325086

SDG No.: 680-100443-01

Instrument ID: CMSD GC Column: RXi- 5Sil MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/18/2014 11:34 Calibration End Date: 04/18/2014 13:52 Calibration ID: 28451

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-325086/3	DD1803.D
Level 2	IC 680-325086/8	DD1808.D
Level 3	IC 680-325086/7	DD1807.D
Level 4	IC 680-325086/6	DD1806.D
Level 5	ICIS 680-325086/2	DD1802.D
Level 6	IC 680-325086/5	DD1805.D
Level 7	IC 680-325086/4	DD1804.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	NPT	Ave	29304 3274172	64002 6025903	174998	295680	1743155	0.100 10.0	0.200 20.0	0.500	1.00	5.00
2-Methylnaphthalene	NPT	Ave	18599 2174978	41070 3965038	108885	188484	1105985	0.100 10.0	0.200 20.0	0.500	1.00	5.00
1-Methylnaphthalene	NPT	Ave	19656 2193462	43620 4081666	110794	195162	1130881	0.100 10.0	0.200 20.0	0.500	1.00	5.00
1,1'-Biphenyl	ANT	QuaF	22087 2737737	98111 5009285	139492	228234	1372694	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Acenaphthylene	ANT	Ave	25270 3359487	57600 6176515	159292	270941	1679928	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Acenaphthene	ANT	Ave	18614 2128505	41504 3922734	107798	181987	1064689	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Dibenzofuran	ANT	QuaF	24219 2949705	117971 5229365	145228	247241	1439982	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Fluorene	ANT	Ave	18757 2441767	43501 4393638	117127	199922	1204783	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Phenanthrene	PHN	Ave	28744 3380229	64250 6021976	162447	279697	1668324	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Anthracene	PHN	Ave	23894 3122862	53476 5460519	134265	232664	1470616	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Fluoranthene	PHN	Ave	27587 3873293	67665 6886954	164484	295378	1835005	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Pyrene	CRY	Ave	30251 3909588	70688 7054895	166077	304707	1873136	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Benzo[a]anthracene	CRY	Ave	23800 3473601	62894 5890259	141297	252808	1637483	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Chrysene	CRY	Ave	23470 3395190	65144 5726362	143438	259954	1576685	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Benzo[b]fluoranthene	PRY	Ave	21209 3470919	58885 5828935	143426	253784	1460407	0.100 10.0	0.200 20.0	0.500	1.00	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-100443-1 Analy Batch No.: 325086
SDG No.: 680-100443-01

Instrument ID: CMSD GC Column: RXi- 5Sil MS ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/18/2014 11:34 Calibration End Date: 04/18/2014 13:52 Calibration ID: 28451

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzo[k]fluoranthene	PRY	Ave	21770 3319443	60128 5736622	129629	252400	1682125	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Benzo[a]pyrene	PRY	Ave	16583 2919325	49143 4906176	113053	205111	1311353	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Indeno[1,2,3-cd]pyrene	CRY	Ave	22511 3218746	56637 5327945	132959	243559	1421370	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Dibenz(a,h)anthracene	PRY	Ave	19426 2752648	44898 4602108	107993	201528	1190351	0.100 10.0	0.200 20.0	0.500	1.00	5.00
Benzo[g,h,i]perylene	PRY	Ave	21684 2707705	47915 4451262	114139	214579	1208143	0.100 10.0	0.200 20.0	0.500	1.00	5.00
o-Terphenyl	CRY	Ave	16320 2008507	38814 3737406	94570	159708	972864	0.100 10.0	0.200 20.0	0.500	1.00	5.00

Curve Type Legend:

Ave = Average ISTD

QuaF = Quadratic ISTD forced zero

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1802.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 18-Apr-2014 11:34:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 680-0008209-002
 Operator ID: Instrument ID: CMSD
 Sublist: chrom-8270_LLPAH_CMSD*sub1
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:35 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

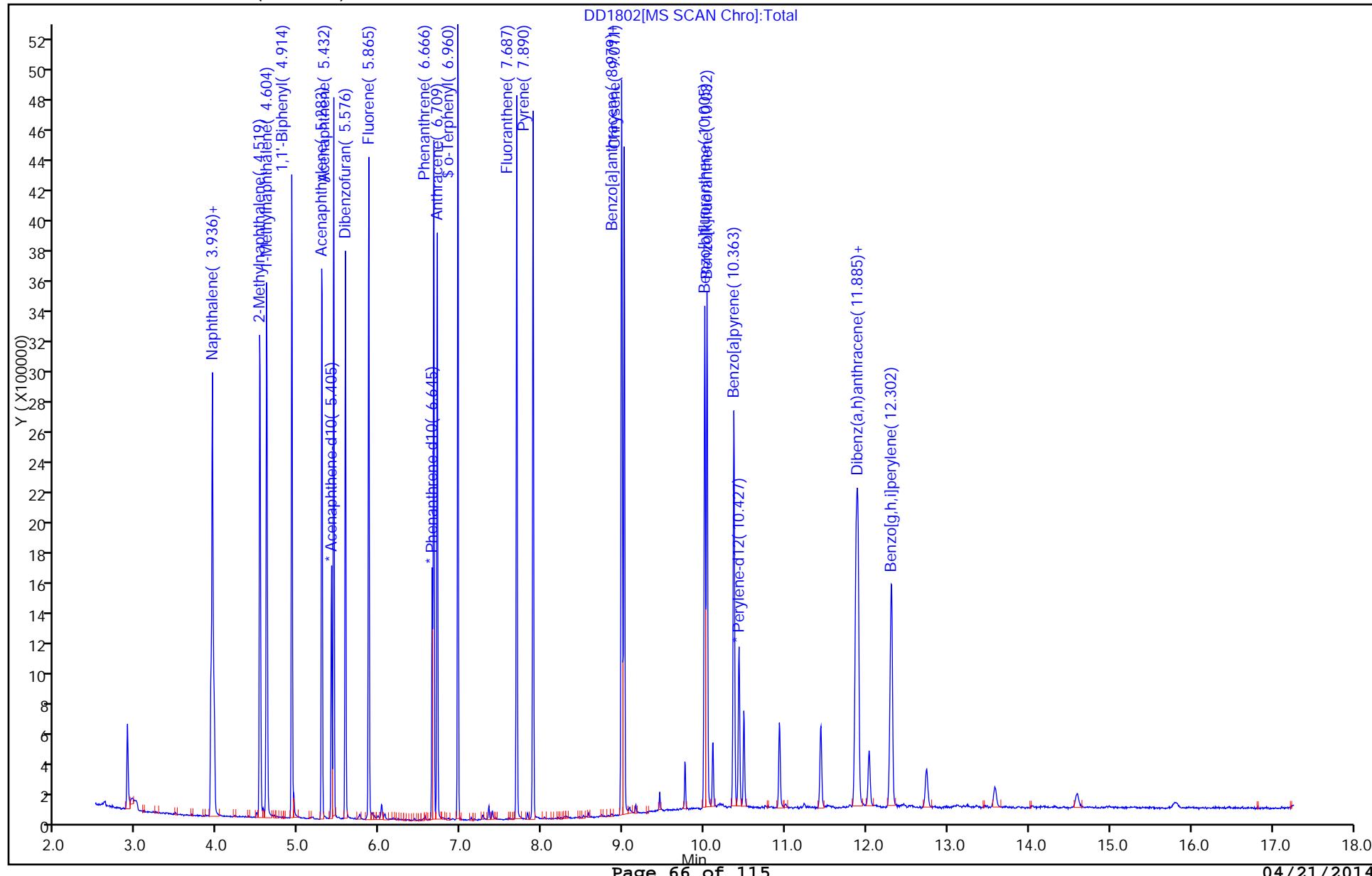
First Level Reviewer: moorer Date: 18-Apr-2014 12:31:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.920	3.920	0.000	99	658267	2.00	2.00	
* 2 Acenaphthene-d10	164	5.405	5.405	0.000	92	367294	2.00	2.00	
* 3 Phenanthrene-d10	188	6.645	6.645	0.000	98	589826	2.00	2.00	
* 4 Chrysene-d12	240	8.990	8.990	0.000	98	615929	2.00	2.00	
* 5 Perylene-d12	264	10.427	10.427	0.000	97	483740	2.00	2.00	
\$ 6 o-Terphenyl	230	6.960	6.960	0.000	87	972864	5.00	4.91	
7 Naphthalene	128	3.936	3.936	0.000	99	1743155	5.00	5.14	
9 2-Methylnaphthalene	142	4.519	4.519	0.000	83	1105985	5.00	5.08	
8 1-Methylnaphthalene	142	4.604	4.604	0.000	83	1130881	5.00	5.03	
10 1,1'-Biphenyl	154	4.914	4.914	0.000	99	1372694	5.00	4.78	
11 Acenaphthylene	152	5.283	5.283	0.000	97	1679928	5.00	5.33	
12 Acenaphthene	153	5.432	5.432	0.000	93	1064689	5.00	5.06	
13 Dibenzofuran	168	5.576	5.576	0.000	100	1439982	5.00	4.65	
14 Fluorene	166	5.865	5.865	0.000	85	1204783	5.00	5.24	
15 Phenanthrene	178	6.666	6.666	0.000	96	1668324	5.00	5.06	
16 Anthracene	178	6.709	6.709	0.000	98	1470616	5.00	5.16	
17 Fluoranthene	202	7.687	7.687	0.000	98	1835005	5.00	5.20	
18 Pyrene	202	7.890	7.890	0.000	98	1873136	5.00	5.05	
19 Benzo[a]anthracene	228	8.979	8.979	0.000	98	1637483	5.00	5.19	
20 Chrysene	228	9.011	9.011	0.000	97	1576685	5.00	5.03	
21 Benzo[b]fluoranthene	252	10.005	10.005	0.000	98	1460407	5.00	4.78	
22 Benzo[k]fluoranthene	252	10.032	10.032	0.000	96	1682125	5.00	5.50	
23 Benzo[a]pyrene	252	10.363	10.363	0.000	96	1311353	5.00	5.18	
24 Indeno[1,2,3-cd]pyrene	276	11.869	11.869	0.000	99	1421370	5.00	4.90	
25 Dibenz(a,h)anthracene	278	11.896	11.896	0.000	94	1190351	5.00	4.87	
26 Benzo[g,h,i]perylene	276	12.307	12.307	0.000	91	1208143	5.00	4.77	

Report Date: 18-Apr-2014 16:39:35

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah
 Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1802.D
 Injection Date: 18-Apr-2014 11:34:30 Instrument ID: CMSD
 Lims ID: ICIS Operator ID:
 Client ID:
 Injection Vol: 2.0 ul Worklist Smp#: 2
 Method: 8270_LLPAH_CMSD Dil. Factor: 1.0000
 Column: Restek RXi-5Sil MS (0.25 mm) Limit Group: 8270D_LL_PAH



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1803.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 18-Apr-2014 11:57:30 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: RL
 Misc. Info.: 680-0008209-003
 Operator ID: Instrument ID: CMSD
 Sublist: chrom-8270_LLPAH_CMSD*sub1
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:36 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: moorer Date: 18-Apr-2014 14:27:36

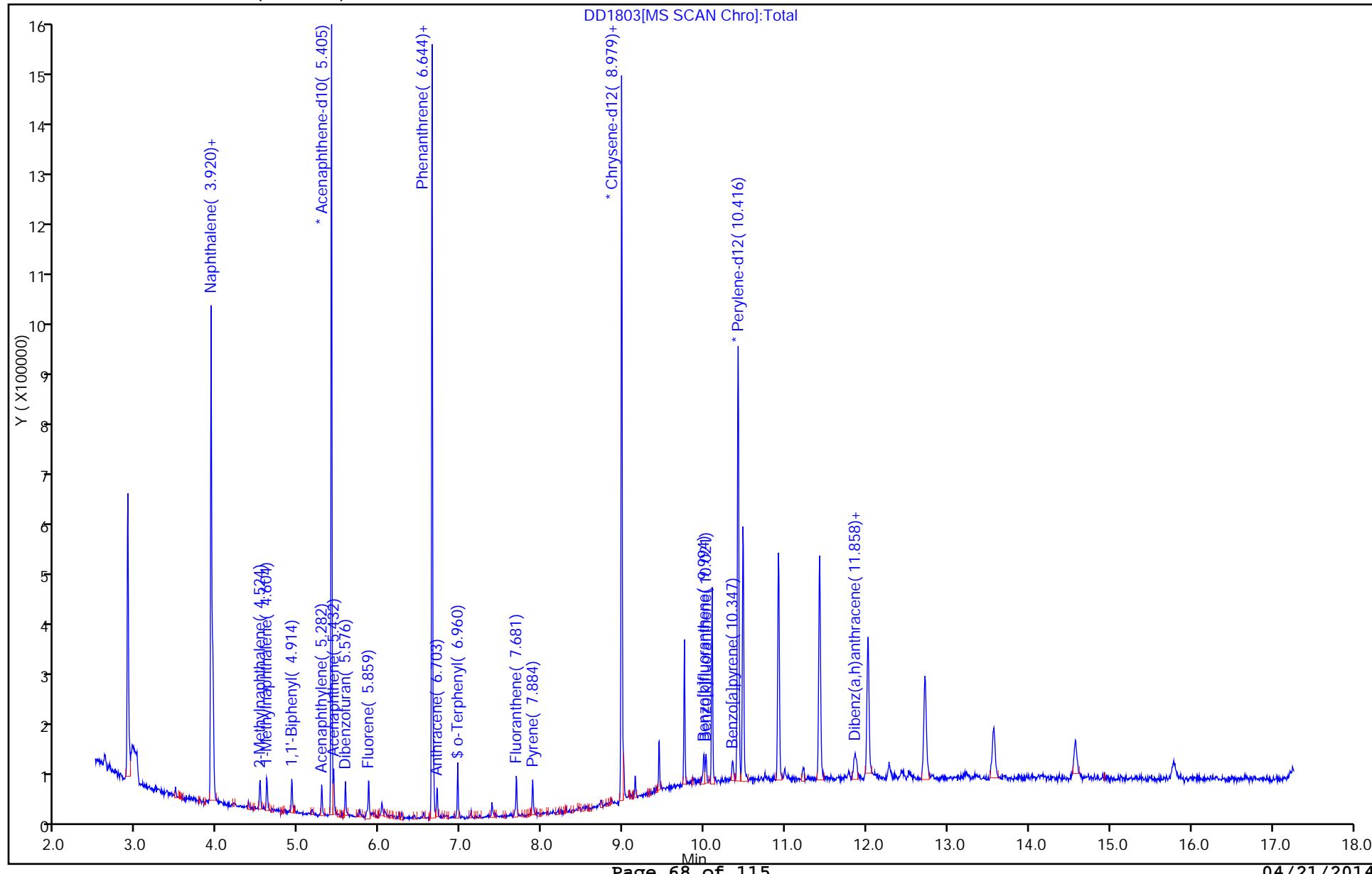
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.920	3.920	0.000	99	597772	2.00	2.00	
* 2 Acenaphthene-d10	164	5.405	5.405	0.000	90	343558	2.00	2.00	
* 3 Phenanthrene-d10	188	6.644	6.645	-0.001	98	531244	2.00	2.00	
* 4 Chrysene-d12	240	8.979	8.990	-0.011	97	499945	2.00	2.00	
* 5 Perylene-d12	264	10.416	10.427	-0.011	97	388644	2.00	2.00	
\$ 6 o-Terphenyl	230	6.960	6.960	0.000	88	16320	0.1000	0.1014	
7 Naphthalene	128	3.936	3.936	0.000	80	29304	0.1000	0.0952	
9 2-Methylnaphthalene	142	4.524	4.519	0.005	78	18599	0.1000	0.0940	
8 1-Methylnaphthalene	142	4.604	4.604	0.000	83	19656	0.1000	0.0963	
10 1,1'-Biphenyl	154	4.919	4.914	0.005	97	22087	0.1000	0.0841	
11 Acenaphthylene	152	5.282	5.283	-0.001	95	25270	0.1000	0.0858	
12 Acenaphthene	153	5.432	5.432	0.000	62	18614	0.1000	0.0946	
13 Dibenzofuran	168	5.576	5.576	0.000	98	24219	0.1000	0.0845	
14 Fluorene	166	5.864	5.865	-0.001	90	18757	0.1000	0.0872	
15 Phenanthrene	178	6.660	6.666	-0.006	45	28744	0.1000	0.0968	
16 Anthracene	178	6.703	6.709	-0.006	93	23894	0.1000	0.0930	
17 Fluoranthene	202	7.686	7.687	0.000	96	27587	0.1000	0.0867	
18 Pyrene	202	7.884	7.890	-0.006	96	30251	0.1000	0.1004	
19 Benzo[a]anthracene	228	8.968	8.979	-0.011	61	23800	0.1000	0.0930	
20 Chrysene	228	9.006	9.011	-0.005	63	23470	0.1000	0.0922	
21 Benzo[b]fluoranthene	252	9.994	10.005	-0.011	94	21209	0.1000	0.0865	
22 Benzo[k]fluoranthene	252	10.021	10.032	-0.011	65	21770	0.1000	0.0886	
23 Benzo[a]pyrene	252	10.347	10.363	-0.017	90	16583	0.1000	0.0816	
24 Indeno[1,2,3-cd]pyrene	276	11.848	11.869	-0.021	93	22511	0.1000	0.0955	
25 Dibenz(a,h)anthracene	278	11.874	11.896	-0.022	82	19426	0.1000	0.0988	
26 Benzo[g,h,i]perylene	276	12.286	12.307	-0.021	84	21684	0.1000	0.1066	

Report Date: 18-Apr-2014 16:39:36

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah
Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1803.D
Injection Date: 18-Apr-2014 11:57:30 Instrument ID: CMSD
Lims ID: IC Operator ID:
Client ID:
Injection Vol: 2.0 ul Dil. Factor: 1.0000 ALS Bottle#: 3
Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
Column: Restek RXi-5Sil MS (0.25 mm)

Worklist Smp#: 3



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1804.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 18-Apr-2014 12:20:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 680-0008209-004
 Operator ID: Instrument ID: CMSD
 Sublist: chrom-8270_LLPAH_CMSD*sub1
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:38 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

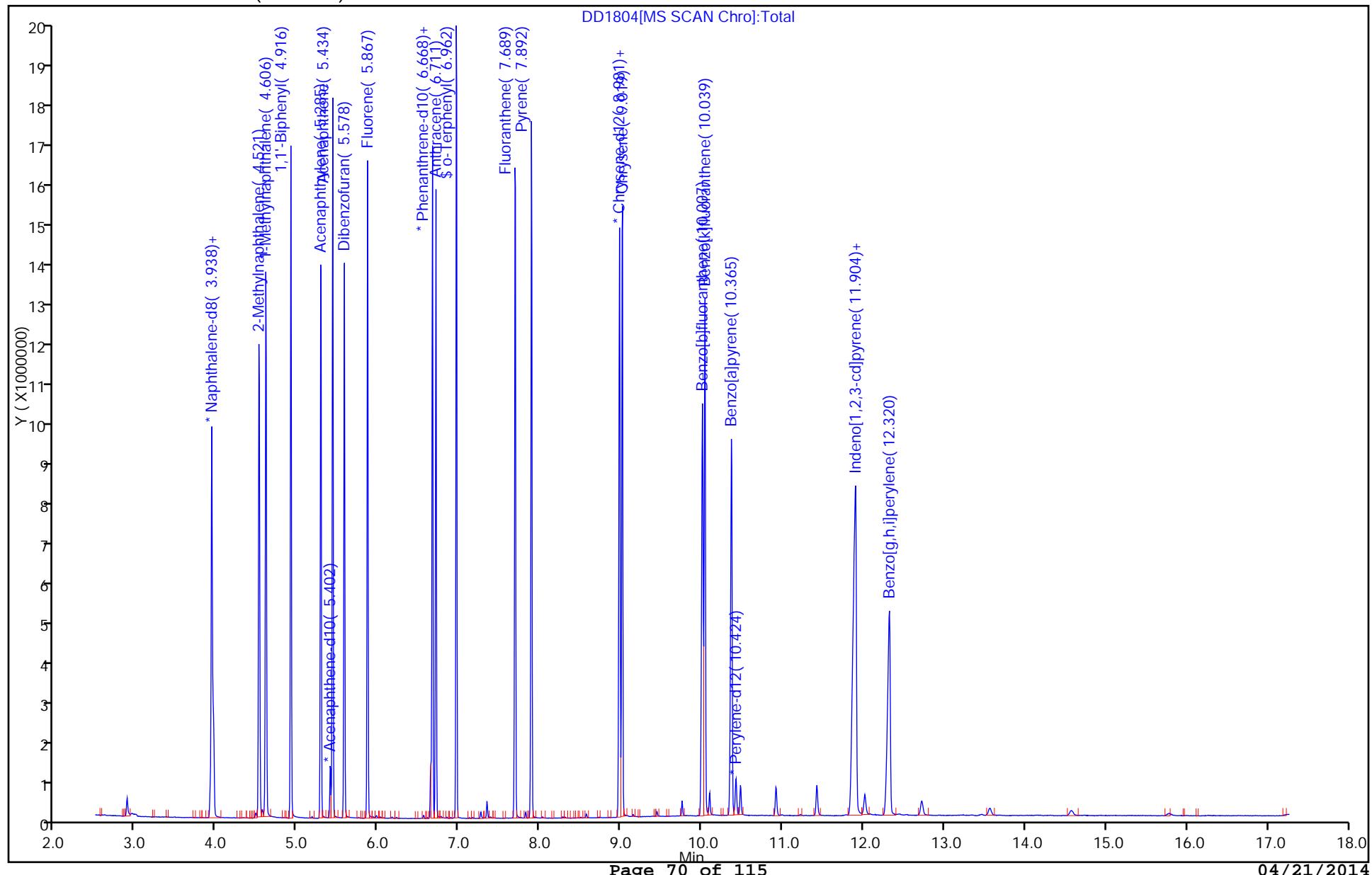
First Level Reviewer: moorer Date: 18-Apr-2014 14:30:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.917	3.920	-0.003	99	527940	2.00	2.00	
* 2 Acenaphthene-d10	164	5.402	5.405	-0.003	92	299921	2.00	2.00	
* 3 Phenanthrene-d10	188	6.647	6.645	0.002	98	469346	2.00	2.00	
* 4 Chrysene-d12	240	8.992	8.990	0.002	95	502709	2.00	2.00	
* 5 Perylene-d12	264	10.424	10.427	-0.003	98	391539	2.00	2.00	
\$ 6 o-Terphenyl	230	6.962	6.960	0.002	88	3737406	20.0	23.1	
7 Naphthalene	128	3.938	3.936	0.002	99	6025903	20.0	22.2	
9 2-Methylnaphthalene	142	4.521	4.519	0.002	81	3965038	20.0	22.7	
8 1-Methylnaphthalene	142	4.606	4.604	0.002	82	4081666	20.0	22.6	
10 1,1'-Biphenyl	154	4.916	4.914	0.002	99	5009285	20.0	20.0	
11 Acenaphthylene	152	5.285	5.283	0.002	97	6176515	20.0	24.0	
12 Acenaphthene	153	5.434	5.432	0.002	93	3922734	20.0	22.8	
13 Dibenzofuran	168	5.578	5.576	0.002	99	5229365	20.0	20.0	
14 Fluorene	166	5.867	5.865	0.002	85	4393638	20.0	23.4	
15 Phenanthrene	178	6.668	6.666	0.002	96	6021976	20.0	23.0	
16 Anthracene	178	6.711	6.709	0.002	98	5460519	20.0	24.1	
17 Fluoranthene	202	7.694	7.687	0.008	99	6886954	20.0	24.5	
18 Pyrene	202	7.892	7.890	0.002	98	7054895	20.0	23.3	
19 Benzo[a]anthracene	228	8.981	8.979	0.002	98	5890259	20.0	22.9	
20 Chrysene	228	9.019	9.011	0.008	96	5726362	20.0	22.4	
21 Benzo[b]fluoranthene	252	10.007	10.005	0.002	97	5828935	20.0	23.6	
22 Benzo[k]fluoranthene	252	10.039	10.032	0.007	99	5736622	20.0	23.2	
23 Benzo[a]pyrene	252	10.365	10.363	0.002	96	4906176	20.0	24.0	
24 Indeno[1,2,3-cd]pyrene	276	11.882	11.869	0.013	96	5327945	20.0	22.5	
25 Dibenz(a,h)anthracene	278	11.904	11.896	0.008	93	4602108	20.0	23.2	
26 Benzo[g,h,i]perylene	276	12.320	12.307	0.013	95	4451262	20.0	21.7	

Report Date: 18-Apr-2014 16:39:39

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah
 Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1804.D
 Injection Date: 18-Apr-2014 12:20:30 Instrument ID: CMSD
 Lims ID: IC Operator ID:
 Client ID:
 Injection Vol: 2.0 ul Worklist Smp#: 4
 Method: 8270_LLPAH_CMSD Dil. Factor: 1.0000
 Column: Restek RXi-5Sil MS (0.25 mm) Limit Group: 8270D_LL_PAH



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1805.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 18-Apr-2014 12:43:30 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 680-0008209-005
 Operator ID: Instrument ID: CMSD
 Sublist: chrom-8270_LLPAH_CMSD*sub1
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:39 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: moorer Date: 18-Apr-2014 14:30:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.919	3.920	-0.001	99	585244	2.00	2.00	
* 2 Acenaphthene-d10	164	5.404	5.405	-0.001	92	335844	2.00	2.00	
* 3 Phenanthrene-d10	188	6.644	6.645	-0.001	98	560187	2.00	2.00	
* 4 Chrysene-d12	240	8.989	8.990	-0.001	98	608745	2.00	2.00	
* 5 Perylene-d12	264	10.421	10.427	-0.006	98	476255	2.00	2.00	
\$ 6 o-Terphenyl	230	6.964	6.960	0.004	88	2008507	10.0	10.3	
7 Naphthalene	128	3.935	3.936	-0.001	99	3274172	10.0	10.9	
9 2-Methylnaphthalene	142	4.523	4.519	0.004	81	2174978	10.0	11.2	
8 1-Methylnaphthalene	142	4.608	4.604	0.004	82	2193462	10.0	11.0	
10 1,1'-Biphenyl	154	4.918	4.914	0.004	99	2737737	10.0	10.2	
11 Acenaphthylene	152	5.287	5.283	0.004	97	3359487	10.0	11.7	
12 Acenaphthene	153	5.431	5.432	-0.001	93	2128505	10.0	11.1	
13 Dibenzofuran	168	5.575	5.576	-0.001	100	2949705	10.0	10.3	
14 Fluorene	166	5.864	5.865	-0.001	85	2441767	10.0	11.6	
15 Phenanthrene	178	6.665	6.666	-0.001	97	3380229	10.0	10.8	
16 Anthracene	178	6.708	6.709	-0.001	98	3122862	10.0	11.5	
17 Fluoranthene	202	7.691	7.687	0.005	99	3873293	10.0	11.5	
18 Pyrene	202	7.889	7.890	-0.001	98	3909588	10.0	10.7	
19 Benzo[a]anthracene	228	8.978	8.979	-0.001	98	3473601	10.0	11.1	
20 Chrysene	228	9.016	9.011	0.005	97	3395190	10.0	10.9	
21 Benzo[b]fluoranthene	252	10.004	10.005	-0.001	98	3470919	10.0	11.5	
22 Benzo[k]fluoranthene	252	10.031	10.032	-0.001	100	3319443	10.0	11.0	
23 Benzo[a]pyrene	252	10.362	10.363	-0.001	96	2919325	10.0	11.7	
24 Indeno[1,2,3-cd]pyrene	276	11.868	11.869	-0.001	94	3218746	10.0	11.2	
25 Dibenz(a,h)anthracene	278	11.895	11.896	-0.001	94	2752648	10.0	11.4	
26 Benzo[g,h,i]perylene	276	12.307	12.307	-0.001	97	2707705	10.0	10.9	

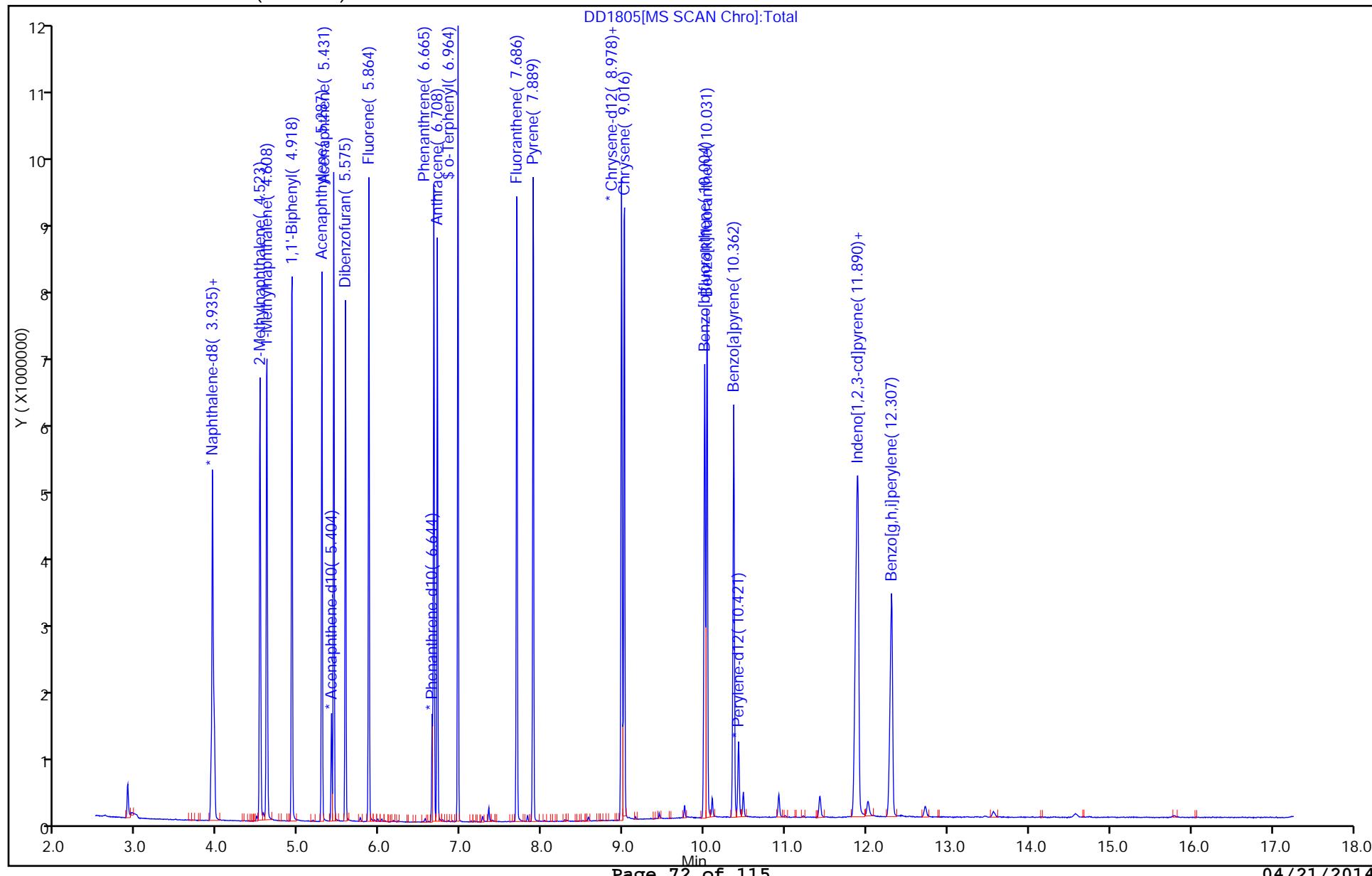
Report Date: 18-Apr-2014 16:39:40

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1805.D
 Injection Date: 18-Apr-2014 12:43:30 Instrument ID: CMSD
 Lims ID: IC Operator ID:
 Client ID:
 Injection Vol: 2.0 ul Dil. Factor: 1.0000 ALS Bottle#: 5
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)

Worklist Smp#: 5



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1806.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 18-Apr-2014 13:06:30 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 680-0008209-006
 Operator ID: Instrument ID: CMSD
 Sublist: chrom-8270_LLPAH_CMSD*sub1
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:40 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: moorer Date: 18-Apr-2014 14:30:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.919	3.920	-0.001	98	596388	2.00	2.00	
* 2 Acenaphthene-d10	164	5.404	5.405	-0.001	88	338830	2.00	2.00	
* 3 Phenanthrene-d10	188	6.644	6.645	-0.001	98	517728	2.00	2.00	
* 4 Chrysene-d12	240	8.984	8.990	-0.006	98	531595	2.00	2.00	
* 5 Perylene-d12	264	10.421	10.427	-0.006	98	412506	2.00	2.00	
\$ 6 o-Terphenyl	230	6.959	6.960	-0.001	88	159708	1.00	0.9336	
7 Naphthalene	128	3.941	3.936	0.005	98	295680	1.00	0.9627	
9 2-Methylnaphthalene	142	4.523	4.519	0.004	79	188484	1.00	0.9552	
8 1-Methylnaphthalene	142	4.608	4.604	0.004	86	195162	1.00	0.9583	
10 1,1'-Biphenyl	154	4.918	4.914	0.004	99	228234	1.00	0.8776	
11 Acenaphthylene	152	5.287	5.283	0.004	97	270941	1.00	0.9325	
12 Acenaphthene	153	5.431	5.432	-0.001	92	181987	1.00	0.9383	
13 Dibenzofuran	168	5.575	5.576	-0.001	100	247241	1.00	0.8732	
14 Fluorene	166	5.864	5.865	-0.001	93	199922	1.00	0.9419	
15 Phenanthrene	178	6.665	6.666	-0.001	94	279697	1.00	0.9664	
16 Anthracene	178	6.708	6.709	-0.001	98	232664	1.00	0.9296	
17 Fluoranthene	202	7.685	7.687	-0.001	98	295378	1.00	0.9530	
18 Pyrene	202	7.888	7.890	-0.002	98	304707	1.00	0.9515	
19 Benzo[a]anthracene	228	8.973	8.979	-0.006	95	252808	1.00	0.9288	
20 Chrysene	228	9.005	9.011	-0.006	95	259954	1.00	0.9600	
21 Benzo[b]fluoranthene	252	9.993	10.005	-0.012	97	253784	1.00	0.9748	
22 Benzo[k]fluoranthene	252	10.020	10.032	-0.012	95	252400	1.00	0.9677	
23 Benzo[a]pyrene	252	10.351	10.363	-0.012	96	205111	1.00	0.9509	
24 Indeno[1,2,3-cd]pyrene	276	11.847	11.869	-0.022	98	243559	1.00	0.9722	
25 Dibenz(a,h)anthracene	278	11.874	11.896	-0.022	91	201528	1.00	0.9661	
26 Benzo[g,h,i]perylene	276	12.285	12.307	-0.022	96	214579	1.00	0.99	

Report Date: 18-Apr-2014 16:39:40

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1806.D

Injection Date: 18-Apr-2014 13:06:30

Instrument ID: CMSD

Lims ID: IC

Operator ID:

Client ID:

Worklist Smp#: 6

Injection Vol: 2.0 ul

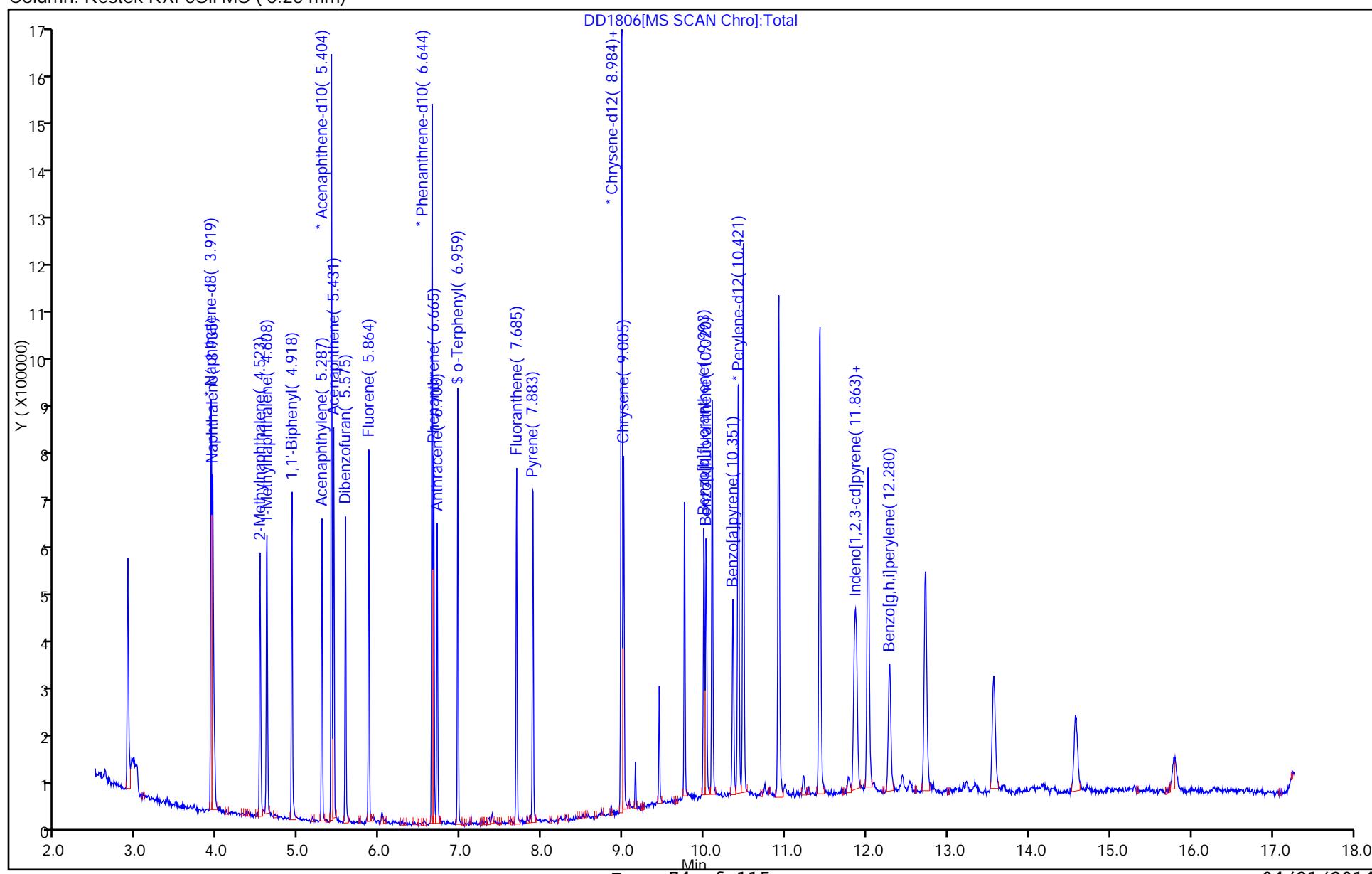
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: 8270_LLPAH_CMSD

Limit Group: 8270D_LL_PAH

Column: Restek RXi-5Sil MS (0.25 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1807.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 18-Apr-2014 13:29:30 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 680-0008209-007
 Operator ID: Instrument ID: CMSD
 Sublist: chrom-8270_LLPAH_CMSD*sub1
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:41 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: moorer Date: 18-Apr-2014 14:30:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.920	3.920	0.000	99	692407	2.00	2.00	
* 2 Acenaphthene-d10	164	5.406	5.405	0.001	91	384295	2.00	2.00	
* 3 Phenanthrene-d10	188	6.645	6.645	0.000	98	592105	2.00	2.00	
* 4 Chrysene-d12	240	8.985	8.990	-0.005	97	579093	2.00	2.00	
* 5 Perylene-d12	264	10.416	10.427	-0.011	98	444377	2.00	2.00	
\$ 6 o-Terphenyl	230	6.960	6.960	0.000	86	94570	0.5000	0.5075	
7 Naphthalene	128	3.936	3.936	0.000	99	174998	0.5000	0.4907	
9 2-Methylnaphthalene	142	4.524	4.519	0.005	83	108885	0.5000	0.4753	
8 1-Methylnaphthalene	142	4.610	4.604	0.006	83	110794	0.5000	0.4686	
10 1,1'-Biphenyl	154	4.919	4.914	0.005	99	139492	0.5000	0.4738	
11 Acenaphthylene	152	5.288	5.283	0.005	96	159292	0.5000	0.4834	
12 Acenaphthene	153	5.432	5.432	0.000	88	107798	0.5000	0.4900	
13 Dibenzofuran	168	5.577	5.576	0.000	99	145228	0.5000	0.4527	
14 Fluorene	166	5.865	5.865	0.000	90	117127	0.5000	0.4866	
15 Phenanthrene	178	6.666	6.666	0.000	95	162447	0.5000	0.4908	
16 Anthracene	178	6.709	6.709	0.000	98	134265	0.5000	0.4691	
17 Fluoranthene	202	7.687	7.687	0.001	98	164484	0.5000	0.4640	
18 Pyrene	202	7.884	7.890	-0.006	97	166077	0.5000	0.4761	
19 Benzo[a]anthracene	228	8.974	8.979	-0.005	89	141297	0.5000	0.4765	
20 Chrysene	228	9.006	9.011	-0.005	96	143438	0.5000	0.4863	
21 Benzo[b]fluoranthene	252	9.994	10.005	-0.011	97	143426	0.5000	0.5114	
22 Benzo[k]fluoranthene	252	10.021	10.032	-0.011	97	129629	0.5000	0.4613	
23 Benzo[a]pyrene	252	10.352	10.363	-0.011	96	113053	0.5000	0.4865	
24 Indeno[1,2,3-cd]pyrene	276	11.854	11.869	-0.015	96	132959	0.5000	0.4872	
25 Dibenz(a,h)anthracene	278	11.875	11.896	-0.021	92	107993	0.5000	0.4806	
26 Benzo[g,h,i]perylene	276	12.281	12.307	-0.026	92	114139	0.5000	0.4908	

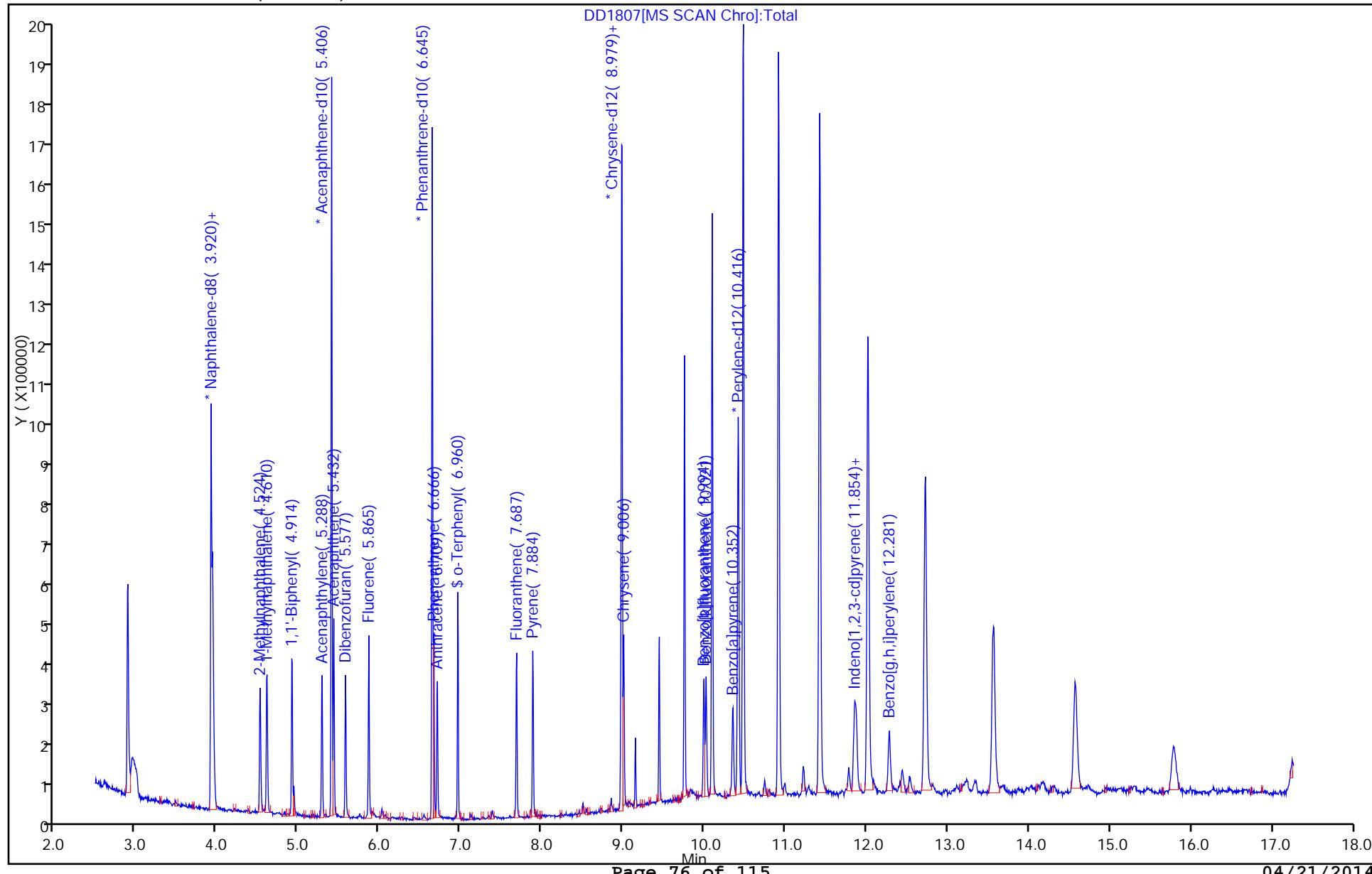
Report Date: 18-Apr-2014 16:39:41

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1807.D
 Injection Date: 18-Apr-2014 13:29:30 Instrument ID: CMSD
 Lims ID: IC Operator ID:
 Client ID:
 Injection Vol: 2.0 ul ALS Bottle#: 7
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)

Worklist Smp#: 7



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 18-Apr-2014 13:52:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC
 Misc. Info.: 680-0008209-008
 Operator ID: Instrument ID: CMSD
 Sublist: chrom-8270_LLPAH_CMSD*sub1
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:42 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: moorer Date: 18-Apr-2014 14:53:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.920	3.920	0.000	99	705203	2.00	2.00	
* 2 Acenaphthene-d10	164	5.405	5.405	0.000	89	415288	2.00	2.00	
* 3 Phenanthrene-d10	188	6.644	6.645	-0.001	98	679627	2.00	2.00	
* 4 Chrysene-d12	240	8.984	8.990	-0.006	97	689195	2.00	2.00	
* 5 Perylene-d12	264	10.416	10.427	-0.011	98	551009	2.00	2.00	
\$ 6 o-Terphenyl	230	6.959	6.960	-0.001	91	38814	0.2000	0.1750	
7 Naphthalene	128	3.936	3.936	0.000	90	64002	0.2000	0.1762	
9 2-Methylnaphthalene	142	4.523	4.519	0.004	83	41070	0.2000	0.1760	
8 1-Methylnaphthalene	142	4.603	4.604	-0.001	88	43620	0.2000	0.1811	
10 1,1'-Biphenyl	154	4.913	4.914	-0.001	98	98111	0.2000	0.3086	
11 Acenaphthylene	152	5.287	5.283	0.004	95	57600	0.2000	0.1617	
12 Acenaphthene	153	5.431	5.432	-0.001	87	41504	0.2000	0.1746	
13 Dibenzofuran	168	5.576	5.576	0.000	98	117971	0.2000	0.3404	
14 Fluorene	166	5.864	5.865	-0.001	89	43501	0.2000	0.1672	
15 Phenanthrene	178	6.660	6.666	-0.006	92	64250	0.2000	0.1691	
16 Anthracene	178	6.708	6.709	-0.001	93	53476	0.2000	0.1628	
17 Fluoranthene	202	7.686	7.687	0.000	99	67665	0.2000	0.1663	
18 Pyrene	202	7.883	7.890	-0.007	98	70688	0.2000	0.1703	
19 Benzo[a]anthracene	228	8.973	8.979	-0.006	90	62894	0.2000	0.1782	
20 Chrysene	228	9.005	9.011	-0.006	96	65144	0.2000	0.1856	
21 Benzo[b]fluoranthene	252	9.994	10.005	-0.011	89	58885	0.2000	0.1693	
22 Benzo[k]fluoranthene	252	10.026	10.032	-0.006	92	60128	0.2000	0.1726	
23 Benzo[a]pyrene	252	10.352	10.363	-0.011	94	49143	0.2000	0.1706	
24 Indeno[1,2,3-cd]pyrene	276	11.853	11.869	-0.016	95	56637	0.2000	0.1744	
25 Dibenz(a,h)anthracene	278	11.879	11.896	-0.017	93	44898	0.2000	0.1611	
26 Benzo[g,h,i]perylene	276	12.280	12.307	-0.027	88	47915	0.2000	0.1662	

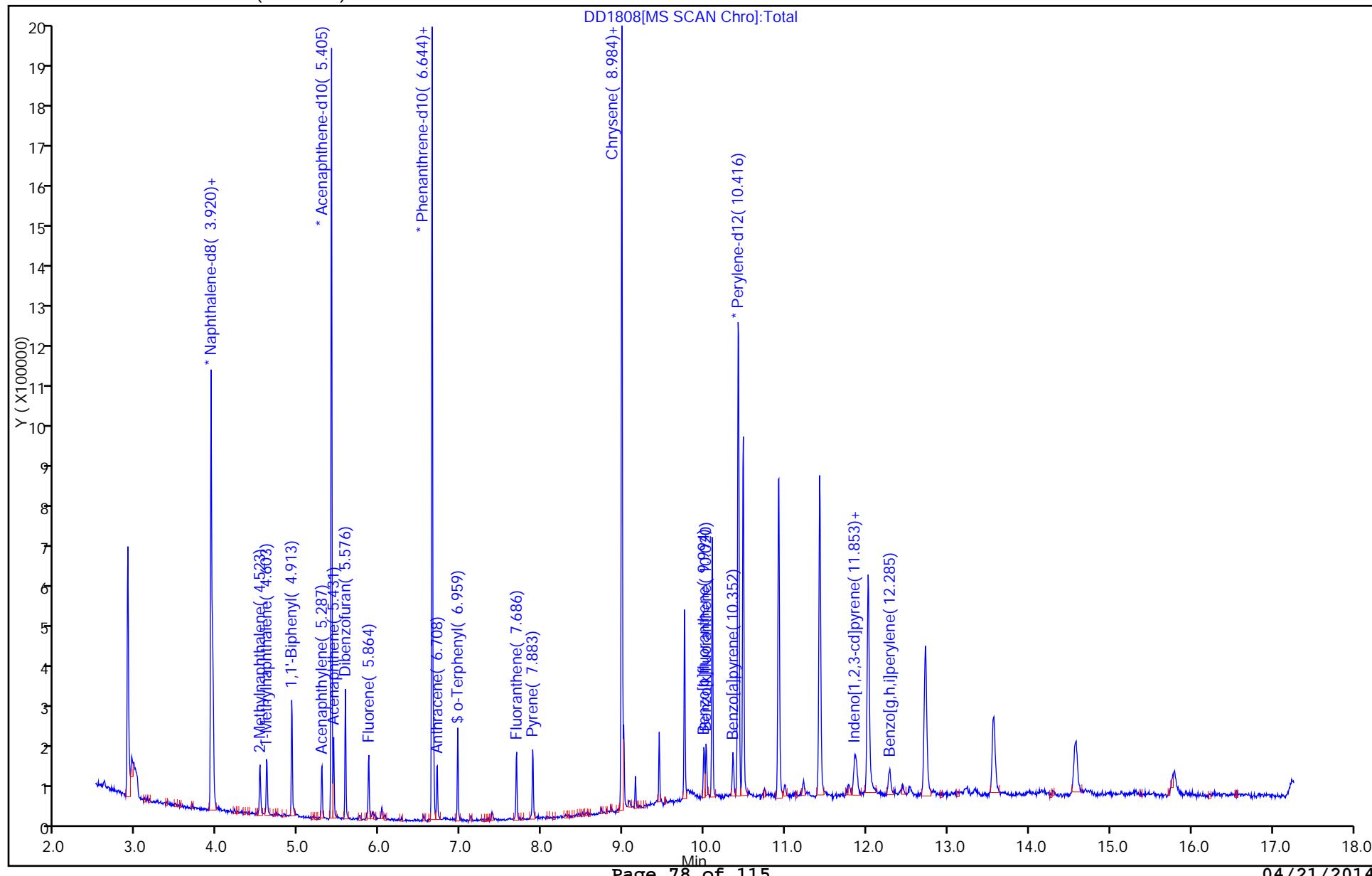
Report Date: 18-Apr-2014 16:39:42

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Injection Date: 18-Apr-2014 13:52:30 Instrument ID: CMSD
 Lims ID: IC Operator ID:
 Client ID:
 Injection Vol: 2.0 ul ALS Bottle#: 8
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)

Worklist Smp#: 8



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Lab Sample ID: ICV 680-325086/9

Calibration Date: 04/18/2014 14:15

Instrument ID: CMSD

Calib Start Date: 04/18/2014 11:34

GC Column: RXi- 5Sil MS ID: 0.25 (mm)

Calib End Date: 04/18/2014 13:52

Lab File ID: DD1809.D

Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.030	1.000	0.7000	4.85	5.00	-2.9	30.0
2-Methylnaphthalene	Ave	0.6617	0.6519	0.4000	4.93	5.00	-1.5	30.0
1-Methylnaphthalene	Ave	0.6829	0.6454		4.72	5.00	-5.5	30.0
1,1'-Biphenyl	QuaF		1.275		4.09	5.00	-18.2	30.0
Acenaphthylene	Ave	1.715	1.689	0.9000	4.92	5.00	-1.5	30.0
Acenaphthene	Ave	1.145	1.110	0.9000	4.85	5.00	-3.0	30.0
Dibenzofuran	QuaF		1.360		4.04	5.00	-19.2	30.0
Fluorene	Ave	1.253	1.233	0.9000	4.92	5.00	-1.6	30.0
Phenanthrone	Ave	1.118	1.074	0.7000	4.80	5.00	-4.0	30.0
Anthracene	Ave	0.9668	0.9539	0.7000	4.93	5.00	-1.3	30.0
Fluoranthene	Ave	1.197	1.160	0.6000	4.84	5.00	-3.2	30.0
Pyrene	Ave	1.205	1.158	0.6000	4.81	5.00	-3.9	30.0
Benzo[a]anthracene	Ave	1.024	1.010	0.7000	4.93	5.00	-1.4	30.0
Chrysene	Ave	1.019	0.9583	0.7000	4.70	5.00	-5.9	30.0
Benzo[b]fluoranthene	Ave	1.262	1.303	0.4000	5.16	5.00	3.2	30.0
Benzo[k]fluoranthene	Ave	1.265	1.248	0.4000	4.93	5.00	-1.3	30.0
Benzo[a]pyrene	Ave	1.046	1.078	0.4000	5.15	5.00	3.1	30.0
Indeno[1,2,3-cd]pyrene	Ave	0.9425	0.9399	0.2000	4.99	5.00	-0.3	30.0
Dibenz(a,h)anthracene	Ave	1.011	1.011	0.2000	5.00	5.00	-0.0	30.0
Benzo[g,h,i]perylene	Ave	1.047	1.031	0.2000	4.93	5.00	-1.4	30.0
o-Terphenyl	Ave	0.6436	0.6220		4.83	5.00	-3.4	30.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1809.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 18-Apr-2014 14:15:30 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 680-0008209-009
 Operator ID: Instrument ID: CMSD
 Sublist:
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:42 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: moorer Date: 18-Apr-2014 15:27:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.918	3.920	-0.002	99	601954	2.00	2.00	
* 2 Acenaphthene-d10	164	5.403	5.405	-0.002	89	353100	2.00	2.00	
* 3 Phenanthrene-d10	188	6.642	6.645	-0.003	98	572421	2.00	2.00	
* 4 Chrysene-d12	240	8.988	8.990	-0.002	97	590459	2.00	2.00	
* 5 Perylene-d12	264	10.419	10.427	-0.008	98	452653	2.00	2.00	
\$ 6 o-Terphenyl	230	6.963	6.960	0.003	90	918098	5.00	4.83	
7 Naphthalene	128	3.939	3.936	0.003	99	1504878	5.00	4.85	
9 2-Methylnaphthalene	142	4.522	4.519	0.003	81	981065	5.00	4.93	
8 1-Methylnaphthalene	142	4.607	4.604	0.003	82	971204	5.00	4.72	
10 1,1'-Biphenyl	154	4.917	4.914	0.003	99	1125599	5.00	4.09	
11 Acenaphthylene	152	5.286	5.283	0.003	97	1491113	5.00	4.92	
12 Acenaphthene	153	5.430	5.432	-0.002	93	980085	5.00	4.85	
13 Dibenzofuran	168	5.574	5.576	-0.002	99	1200907	5.00	4.04	
14 Fluorene	166	5.863	5.865	-0.002	92	1088055	5.00	4.92	
15 Phenanthrene	178	6.664	6.666	-0.002	96	1536448	5.00	4.80	
16 Anthracene	178	6.707	6.709	-0.002	98	1365004	5.00	4.93	
17 Fluoranthene	202	7.684	7.687	-0.002	98	1659363	5.00	4.84	
18 Pyrene	202	7.887	7.890	-0.003	98	1709568	5.00	4.81	
19 Benzo[a]anthracene	228	8.977	8.979	-0.002	98	1490834	5.00	4.93	
20 Chrysene	228	9.009	9.011	-0.002	97	1414632	5.00	4.70	
21 Benzo[b]fluoranthene	252	9.997	10.005	-0.008	98	1474258	5.00	5.16	
22 Benzo[k]fluoranthene	252	10.024	10.032	-0.008	99	1412042	5.00	4.93	
23 Benzo[a]pyrene	252	10.355	10.363	-0.008	96	1219794	5.00	5.15	
24 Indeno[1,2,3-cd]pyrene	276	11.862	11.869	-0.007	97	1387429	5.00	4.99	
25 Dibenz(a,h)anthracene	278	11.878	11.896	-0.018	89	1144007	5.00	5.00	
26 Benzo[g,h,i]perylene	276	12.289	12.307	-0.018	93	1167208	5.00	4.93	

Report Date: 18-Apr-2014 16:39:43

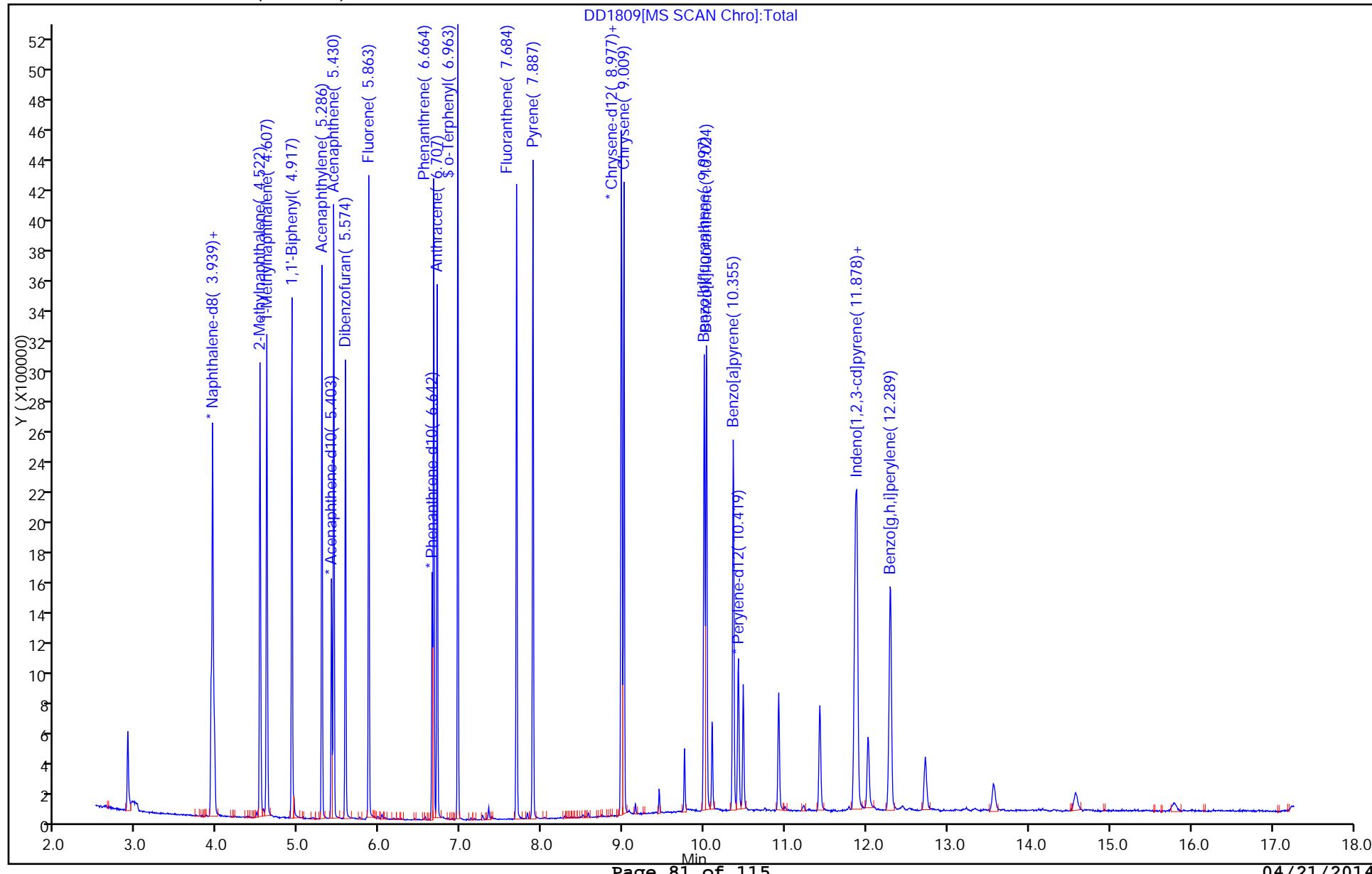
Chrom Revision: 2.2 14-Apr-2014 13:40:08

Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1809.D
 Injection Date: 18-Apr-2014 14:15:30
 Lims ID: ICV
 Client ID:
 Injection Vol: 2.0 ul
 Method: 8270_LLPAH_CMSD
 Column: Restek RXi-5Sil MS (0.25 mm)

Instrument ID: CMSD
 Dil. Factor: 1.0000
 Limit Group: 8270D_LL_PAH

Operator ID:
 Worklist Smp#: 9

ALS Bottle#: 9



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1801.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 18-Apr-2014 11:08:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Misc. Info.: 680-0008209-001
 Operator ID: Instrument ID: CMSD
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 18-Apr-2014 16:39:34 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK048

First Level Reviewer: moorer Date: 18-Apr-2014 11:57:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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27 DFTPP

28 4,4'-DDD	235	6.405	6.405	0.000	62	8747		NR	7
29 4,4'-DDT	235	6.624	6.624	0.000	98	389724	NR	NR	7

QC Flag Legend

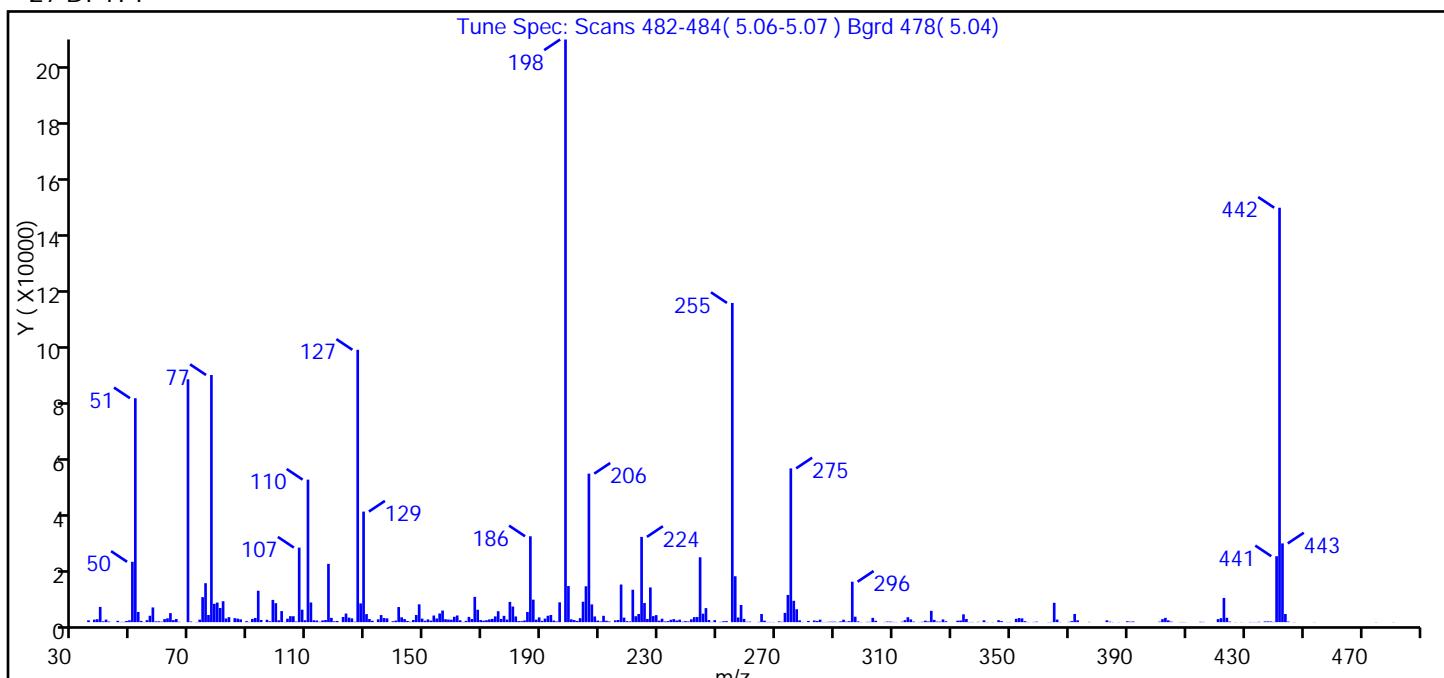
Processing Flags

7 - Failed Limit of Detection

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1801.D
 Injection Date: 18-Apr-2014 11:08:30 Instrument ID: CMSD
 Lims ID: DFTPP
 Client ID:
 Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Tune Method: DFTPP Method 525.2, BP 442

27 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
442	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 442	54.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Present	58.60
70	Less than 2.00% of mass 69	0.20 (0.30)
127	10.00 - 80.00% of mass 442	65.70
197	Less than 2.00% of mass 198	0.00 (0.00)
198	Greater than 50.00% of mass 442	140.60
199	5.00 - 9.00% of mass 198	8.70 (6.20)
275	10.00 - 60.00% of mass 442	37.10
365	Greater than 1.00% of mass 442	4.70
441	Present, but less than mass 443	15.90 (83.70)
443	15.00 - 24.00% of mass 442	19.00

Data File: \\SAVCHROM\\ChromData\CMSD\\20140418-8209.b\\DD1801.D\\8270_LLPAH_CMSD.rslt\\spectra.d
 Injection Date: 18-Apr-2014 11:08:30
 Spectrum: Tune Spec: Scans 482-484(5.06-5.07) Bgrd 478(5.04)
 Base Peak: 198.00
 Minimum % Base Peak: 0
 Number of Points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	630	130.00	2783	219.00	341	315.00	1701
37.00	865	131.00	1070	220.00	241	316.00	945
38.00	1015	132.00	473	221.00	11199	317.00	185
39.00	5275	134.00	983	222.00	2053	319.00	58
40.00	291	135.00	2446	223.00	2811	320.00	119
41.00	882	136.00	1409	224.00	29480	321.00	502
42.00	211	137.00	1311	225.00	6610	322.00	252
45.00	453	139.00	312	226.00	1112	323.00	3908
46.00	84	140.00	534	227.00	12004	324.00	774
47.00	111	141.00	5217	228.00	2087	325.00	192
48.00	405	142.00	1673	229.00	2430	326.00	170
49.00	639	143.00	1068	230.00	508	327.00	940
50.00	20864	144.00	410	231.00	1180	328.00	310
51.00	77432	145.00	134	232.00	251	332.00	497
52.00	3536	146.00	743	233.00	347	333.00	557
53.00	425	147.00	2465	234.00	806	334.00	2694
54.00	58	148.00	6163	235.00	1047	335.00	1092
55.00	691	149.00	1223	236.00	569	336.00	65
56.00	2206	150.00	468	237.00	858	337.00	82
57.00	5086	151.00	948	238.00	158	339.00	116
58.00	265	152.00	537	239.00	357	341.00	634
59.00	293	153.00	2297	240.00	238	342.00	63
60.00	158	154.00	1269	241.00	979	344.00	60
61.00	1056	155.00	2999	242.00	1731	346.00	670
62.00	1321	156.00	4011	243.00	1787	347.00	354
63.00	3111	157.00	1020	244.00	22424	349.00	59
64.00	709	158.00	904	245.00	2919	350.00	60
65.00	1089	159.00	842	246.00	4853	352.00	1138
66.00	127	160.00	1852	247.00	727	353.00	1401
69.00	83976	161.00	2309	248.00	90	354.00	1302
70.00	222	162.00	661	249.00	700	355.00	347
72.00	58	163.00	78	251.00	107	356.00	64
73.00	864	164.00	433	252.00	304	358.00	73

Report Date: 18-Apr-2014 16:39:34

Chrom Revision: 2.2 14-Apr-2014 13:40:08

Data File:

\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1801.D\8270_LLPAH_CMSD.rslt\spectra.d

Injection Date:

18-Apr-2014 11:08:30

Spectrum:

Tune Spec: Scans 482-484(5.06-5.07) Bgrd 478(5.04)

Base Peak:

198.00

Minimum % Base Peak: 0

Number of Points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	8643	165.00	1818	253.00	359	359.00	168
75.00	13466	166.00	1090	255.00	110368	363.00	57
76.00	2480	167.00	8734	256.00	15869	364.00	88
77.00	85456	168.00	4287	257.00	1616	365.00	6693
78.00	6347	169.00	727	258.00	5937	366.00	893
79.00	6770	170.00	512	259.00	1124	367.00	67
80.00	4889	171.00	678	260.00	135	370.00	103
81.00	7241	172.00	951	261.00	178	371.00	345
82.00	1274	173.00	1108	264.00	98	372.00	2839
83.00	1725	174.00	1987	265.00	2813	373.00	643
85.00	1374	175.00	3771	266.00	511	377.00	96
86.00	1207	176.00	1107	267.00	76	383.00	626
87.00	956	177.00	2180	268.00	70	384.00	174
89.00	347	178.00	885	269.00	69	385.00	58
90.00	92	179.00	6999	271.00	269	387.00	51
91.00	1122	180.00	5388	272.00	122	390.00	312
92.00	1448	181.00	1961	273.00	3205	391.00	178
93.00	10856	182.00	366	274.00	9392	392.00	229
94.00	760	183.00	336	275.00	53176	401.00	179
96.00	820	184.00	585	276.00	7380	402.00	1038
97.00	303	185.00	3523	277.00	4465	403.00	1481
98.00	7686	186.00	29688	278.00	628	404.00	615
99.00	6560	187.00	7771	279.00	76	405.00	190
100.00	635	188.00	868	281.00	410	408.00	56
101.00	3825	189.00	1645	283.00	575	409.00	67
102.00	93	190.00	443	284.00	419	410.00	53
103.00	1184	191.00	1225	285.00	868	415.00	132
104.00	2068	192.00	2202	286.00	66	416.00	92
105.00	2041	193.00	2472	287.00	65	421.00	1050
106.00	195	194.00	559	288.00	140	422.00	1371
107.00	25776	195.00	250	289.00	162	423.00	8381
108.00	4312	196.00	6847	290.00	172	424.00	1499
109.00	653	198.00	201472	291.00	61	425.00	205
110.00	49272	199.00	12483	292.00	269	427.00	53

Report Date: 18-Apr-2014 16:39:34

Chrom Revision: 2.2 14-Apr-2014 13:40:08

Data File:

\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1801.D\8270_LLPAH_CMSD.rslt\spectra.d

Injection Date:

18-Apr-2014 11:08:30

Spectrum:

Tune Spec: Scans 482-484(5.06-5.07) Bgrd 478(5.04)

Base Peak:

198.00

Minimum % Base Peak: 0

Number of Points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	6802	200.00	971	293.00	847	429.00	53
112.00	642	201.00	717	294.00	182	432.00	82
113.00	566	202.00	424	295.00	320	433.00	58
114.00	134	203.00	1374	296.00	13980	434.00	53
115.00	591	204.00	7049	297.00	1883	435.00	129
116.00	731	205.00	12410	298.00	256	437.00	245
117.00	20152	206.00	51344	299.00	53	438.00	262
118.00	1479	207.00	6133	301.00	110	439.00	229
119.00	297	208.00	1962	302.00	109	440.00	97
120.00	400	209.00	532	303.00	1486	441.00	22792
122.00	1776	210.00	259	304.00	476	442.00	143296
123.00	2976	211.00	2187	307.00	78	443.00	27224
124.00	1565	212.00	480	308.00	190	444.00	2814
125.00	1300	213.00	223	309.00	182	445.00	198
126.00	161	215.00	622	310.00	95	447.00	50
127.00	94168	216.00	733	311.00	54	454.00	55
128.00	6480	217.00	13008	313.00	155	475.00	52
129.00	38232	218.00	1558	314.00	682	481.00	53

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1801.D
Injection Date: 18-Apr-2014 11:08:30 Instrument ID: CMSD
Lims ID: DFTPP
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH

29 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

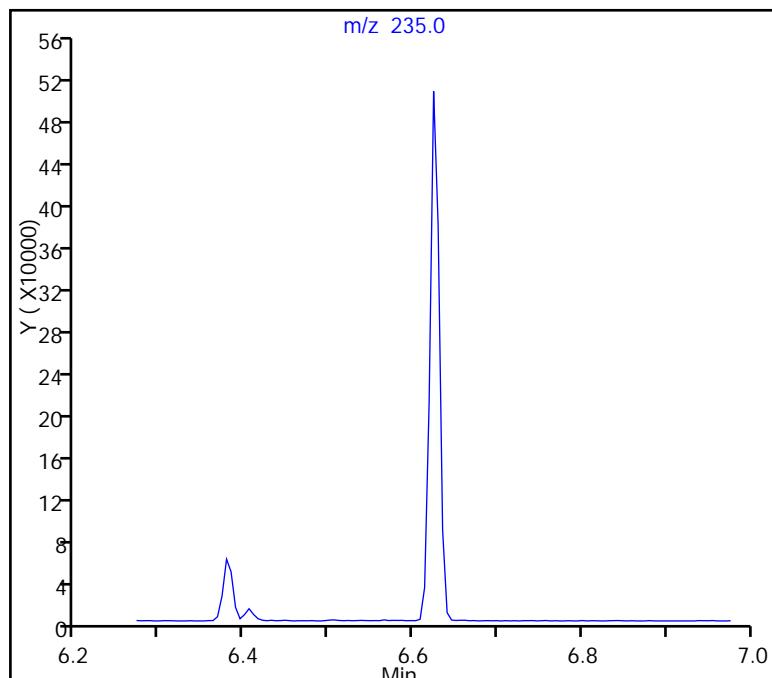
29 4,4'-DDT, Area = 389724

28 4,4'-DDD, Area = 8747

30 4,4'-DDE, Area = 0

%Breakdown: 2.20%, Max Limit: 20.00%

Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
 SDG No.: 680-100443-01
 Client Sample ID: _____ Lab Sample ID: MB 680-324604/3-A
 Matrix: Solid Lab File ID: DD1813.D
 Analysis Method: 8270D_LL_PAH Date Collected: _____
 Extract. Method: 3546 Date Extracted: 04/16/2014 11:40
 Sample wt/vol: 29.99(g) Date Analyzed: 04/18/2014 15:59
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 2(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup:(Y/N) N
 Analysis Batch No.: 325086 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	6.7	U	6.7	3.3
208-96-8	Acenaphthylene	6.7	U	6.7	3.3
120-12-7	Anthracene	6.7	U	6.7	3.3
56-55-3	Benzo[a]anthracene	6.7	U	6.7	3.3
50-32-8	Benzo[a]pyrene	6.7	U	6.7	1.2
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	3.3
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	3.3
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	2.0
218-01-9	Chrysene	6.7	U	6.7	3.3
53-70-3	Dibenz(a,h)anthracene	6.7	U	6.7	3.3
206-44-0	Fluoranthene	6.7	U	6.7	3.3
86-73-7	Fluorene	6.7	U	6.7	3.3
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	3.3
90-12-0	1-Methylnaphthalene	6.7	U	6.7	3.1
91-57-6	2-Methylnaphthalene	6.7	U	6.7	3.3
91-20-3	Naphthalene	6.7	U	6.7	3.3
85-01-8	Phenanthrene	6.7	U	6.7	2.4
129-00-0	Pyrene	6.7	U	6.7	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	87		36-131

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1813.D
 Lims ID: MB 680-324604/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 18-Apr-2014 15:59:30 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: MB-324604/3-A
 Misc. Info.: 680-0008209-013
 Operator ID: Instrument ID: CMSD
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 19-Apr-2014 13:22:53 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: moorer Date: 19-Apr-2014 13:22:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.919	3.920	-0.001	99	816927	2.00	2.00	
* 2 Acenaphthene-d10	164	5.404	5.405	-0.001	92	456771	2.00	2.00	
* 3 Phenanthrene-d10	188	6.644	6.645	-0.001	98	716868	2.00	2.00	
* 4 Chrysene-d12	240	8.984	8.990	-0.006	97	694388	2.00	2.00	
* 5 Perylene-d12	264	10.421	10.427	-0.006	98	588006	2.00	2.00	
\$ 6 o-Terphenyl	230	6.964	6.960	0.004	86	387488	2.00	1.73	
28 4,4'-DDD	235	6.425	6.405	0.020	1	277		NR	7
29 4,4'-DDT	235	6.617	6.624	-0.007	1	78		NR	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

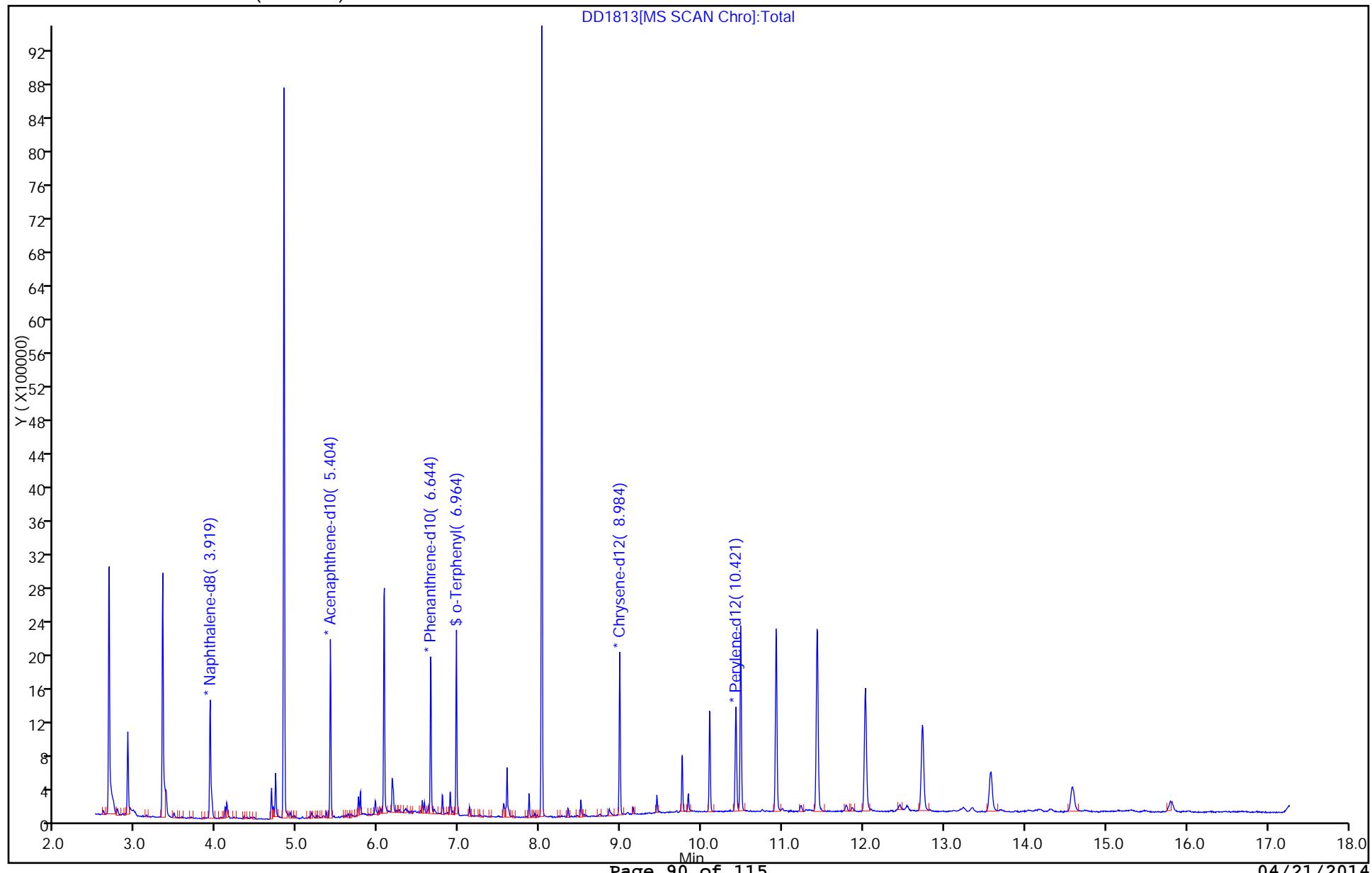
Report Date: 19-Apr-2014 13:22:53

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1813.D
Injection Date: 18-Apr-2014 15:59:30 Instrument ID: CMSD
Lims ID: MB 680-324604/3-A Operator ID:
Client ID:
Injection Vol: 2.0 ul Dil. Factor: 1.0000 ALS Bottle#: 13
Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
Column: Restek RXi-5Sil MS (0.25 mm)

Worklist Smp#: 13



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
SDG No.: 680-100443-01
Client Sample ID: _____ Lab Sample ID: LCS 680-324604/4-A
Matrix: Solid Lab File ID: DD1814.D
Analysis Method: 8270D_LL_PAH Date Collected: _____
Extract. Method: 3546 Date Extracted: 04/16/2014 11:40
Sample wt/vol: 30.04(g) Date Analyzed: 04/18/2014 16:22
Con. Extract Vol.: 1(mL) Dilution Factor: 1
Injection Volume: 2(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup:(Y/N) N
Analysis Batch No.: 325086 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	258		6.7	3.3
208-96-8	Acenaphthylene	254		6.7	3.3
120-12-7	Anthracene	313		6.7	3.3
56-55-3	Benzo[a]anthracene	286		6.7	3.3
50-32-8	Benzo[a]pyrene	296		6.7	1.2
205-99-2	Benzo[b]fluoranthene	270		6.7	3.3
191-24-2	Benzo[g,h,i]perylene	266		6.7	3.3
207-08-9	Benzo[k]fluoranthene	275		6.7	2.0
218-01-9	Chrysene	255		6.7	3.3
53-70-3	Dibenz(a,h)anthracene	291		6.7	3.3
206-44-0	Fluoranthene	285		6.7	3.3
86-73-7	Fluorene	280		6.7	3.3
193-39-5	Indeno[1,2,3-cd]pyrene	283		6.7	3.3
90-12-0	1-Methylnaphthalene	237		6.7	3.1
91-57-6	2-Methylnaphthalene	261		6.7	3.3
91-20-3	Naphthalene	237		6.7	3.3
85-01-8	Phenanthrene	264		6.7	2.4
129-00-0	Pyrene	259		6.7	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	73		36-131

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1814.D
 Lims ID: LCS 680-324604/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 18-Apr-2014 16:22:30 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: LCS-324604/4-A
 Misc. Info.: 680-0008209-014
 Operator ID: Instrument ID: CMSD
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 19-Apr-2014 13:24:10 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: moorer Date: 19-Apr-2014 13:24:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.917	3.920	-0.003	91	662623	2.00	2.00	
* 2 Acenaphthene-d10	164	5.407	5.405	0.002	87	375293	2.00	2.00	
* 3 Phenanthrene-d10	188	6.647	6.645	0.001	98	612413	2.00	2.00	
* 4 Chrysene-d12	240	8.986	8.990	-0.004	97	679164	2.00	2.00	
* 5 Perylene-d12	264	10.423	10.427	-0.004	98	537105	2.00	2.00	
\$ 6 o-Terphenyl	230	6.962	6.960	0.002	90	317675	2.00	1.45	
7 Naphthalene	128	3.933	3.936	-0.003	99	2433974	10.0	7.13	
9 2-Methylnaphthalene	142	4.520	4.519	0.001	83	1719389	10.0	7.84	
8 1-Methylnaphthalene	142	4.606	4.604	0.002	81	1613903	10.0	7.13	
10 1,1'-Biphenyl	154	4.921	4.914	0.007	99	2100203	10.0	7.08	
11 Acenaphthylene	152	5.290	5.283	0.007	96	2450756	10.0	7.62	
12 Acenaphthene	153	5.434	5.432	0.002	93	1662446	10.0	7.74	
13 Dibenzofuran	168	5.578	5.576	0.002	99	2274473	10.0	7.15	
14 Fluorene	166	5.867	5.865	0.002	85	1977264	10.0	8.41	
15 Phenanthrene	178	6.668	6.666	0.002	96	2717111	10.0	7.94	
16 Anthracene	178	6.711	6.709	0.002	98	2787245	10.0	9.41	
17 Fluoranthene	202	7.688	7.687	0.002	98	3137963	10.0	8.56	
18 Pyrene	202	7.891	7.890	0.001	98	3188554	10.0	7.79	
19 Benzo[a]anthracene	228	8.981	8.979	0.002	97	2988618	10.0	8.59	
20 Chrysene	228	9.013	9.011	0.002	96	2648431	10.0	7.66	
21 Benzo[b]fluoranthene	252	10.001	10.005	-0.004	95	2744652	10.0	8.10	
22 Benzo[k]fluoranthene	252	10.033	10.032	0.001	99	2801618	10.0	8.25	
23 Benzo[a]pyrene	252	10.359	10.363	-0.004	96	2499016	10.0	8.90	
24 Indeno[1,2,3-cd]pyrene	276	11.871	11.869	0.002	96	2719024	10.0	8.50	
25 Dibenz(a,h)anthracene	278	11.887	11.896	-0.009	91	2370653	10.0	8.73	
26 Benzo[g,h,i]perylene	276	12.304	12.307	-0.003	93	2247258	10.0	8.00	

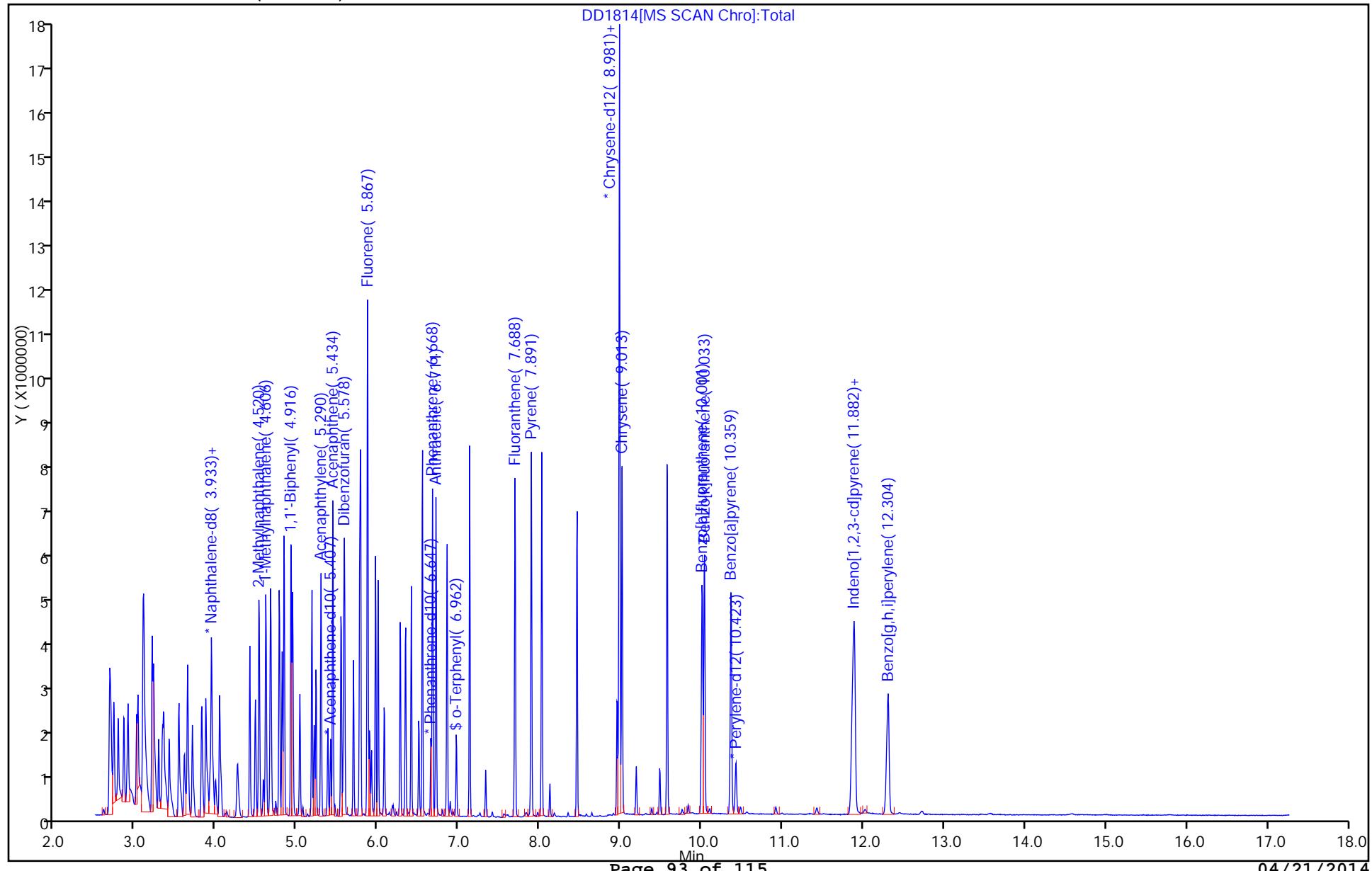
Report Date: 19-Apr-2014 13:24:10

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1814.D
 Injection Date: 18-Apr-2014 16:22:30 Instrument ID: CMSD
 Lims ID: LCS 680-324604/4-A Operator ID:
 Client ID:
 Injection Vol: 2.0 ul Dil. Factor: 1.0000 ALS Bottle#: 14
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)

Worklist Smp#: 14



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah	Job No.: 680-100443-1
SDG No.: 680-100443-01	
Client Sample ID: CV0244A-CS6" MS	Lab Sample ID: 680-100443-2 MS
Matrix: Solid	Lab File ID: DD1815.D
Analysis Method: 8270D_LL_PAH	Date Collected: 04/12/2014 08:55
Extract. Method: 3546	Date Extracted: 04/16/2014 11:40
Sample wt/vol: 29.99(g)	Date Analyzed: 04/18/2014 16:45
Con. Extract Vol.: 1(mL)	Dilution Factor: 10
Injection Volume: 2(uL)	Level: (low/med) Low
% Moisture: 16.6	GPC Cleanup:(Y/N) N
Analysis Batch No.: 325086	Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	340		80	40
208-96-8	Acenaphthylene	298		80	40
120-12-7	Anthracene	512		80	40
56-55-3	Benzo[a]anthracene	2920		80	40
50-32-8	Benzo[a]pyrene	4210		80	14
205-99-2	Benzo[b]fluoranthene	5580		80	40
191-24-2	Benzo[g,h,i]perylene	2560		80	40
207-08-9	Benzo[k]fluoranthene	2230		80	24
218-01-9	Chrysene	3280		80	40
53-70-3	Dibenz(a,h)anthracene	1020		80	40
206-44-0	Fluoranthene	2850		80	40
86-73-7	Fluorene	339		80	40
193-39-5	Indeno[1,2,3-cd]pyrene	2630		80	40
90-12-0	1-Methylnaphthalene	302		80	37
91-57-6	2-Methylnaphthalene	343		80	40
91-20-3	Naphthalene	322		80	40
85-01-8	Phenanthrene	1010		80	29
129-00-0	Pyrene	2520		80	40

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1815.D
 Lims ID: 680-100443-A-2-B MS
 Client ID: CV0244A-CS6"
 Sample Type: MS
 Inject. Date: 18-Apr-2014 16:45:30 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Sample Info: 100443-A-2-A MS; DL10
 Misc. Info.: 680-0008209-015
 Operator ID: Instrument ID: CMSD
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 19-Apr-2014 13:27:33 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: moorer Date: 19-Apr-2014 13:27:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.918	3.920	-0.002	97	629332	0.2000	2.00	
* 2 Acenaphthene-d10	164	5.408	5.405	0.003	90	357355	0.2000	2.00	
* 3 Phenanthrene-d10	188	6.648	6.645	0.003	98	589950	0.2000	2.00	
* 4 Chrysene-d12	240	8.993	8.990	0.003	98	652381	0.2000	2.00	
* 5 Perylene-d12	264	10.430	10.427	0.003	96	548642	0.2000	2.00	
7 Naphthalene	128	3.939	3.936	0.003	99	260663	1.00	0.8042	
9 2-Methylnaphthalene	142	4.522	4.519	0.003	83	178419	1.00	0.8569	
8 1-Methylnaphthalene	142	4.607	4.604	0.003	83	162111	1.00	0.7544	
10 1,1'-Biphenyl	154	4.917	4.914	0.003	99	194129	1.00	0.7083	
11 Acenaphthylene	152	5.291	5.283	0.008	97	228615	1.00	0.7461	
12 Acenaphthene	153	5.435	5.432	0.003	93	174014	1.00	0.8507	
13 Dibenzofuran	168	5.579	5.576	0.003	98	233847	1.00	0.7832	
14 Fluorene	166	5.868	5.865	0.003	87	189985	1.00	0.8487	
15 Phenanthrene	178	6.669	6.666	0.003	96	834898	1.00	2.53	
16 Anthracene	178	6.712	6.709	0.003	99	365335	1.00	1.28	
17 Fluoranthene	202	7.689	7.687	0.003	98	2516245	1.00	7.12	
18 Pyrene	202	7.892	7.890	0.002	98	2480965	1.00	6.31	
19 Benzo[a]anthracene	228	8.982	8.979	0.003	98	2435055	1.00	7.29	
20 Chrysene	228	9.014	9.011	0.003	96	2725206	1.00	8.20	
21 Benzo[b]fluoranthene	252	10.013	10.013	0.008	99	4833095	1.00	14.0	M
22 Benzo[k]fluoranthene	252	10.035	10.035	0.003	96	1938043	1.00	5.59	M
23 Benzo[a]pyrene	252	10.371	10.363	0.008	96	3021104	1.00	10.5	
24 Indeno[1,2,3-cd]pyrene	276	11.878	11.869	0.009	97	2019396	1.00	6.57	
25 Dibenz(a,h)anthracene	278	11.888	11.896	-0.008	73	707881	1.00	2.55	
26 Benzo[g,h,i]perylene	276	12.316	12.307	0.009	92	1839185	1.00	6.41	
28 4,4'-DDD	235	6.327	6.405	-0.078	1	317		NR	7
29 4,4'-DDT	235	6.632	6.624	0.008	1	133		NR	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

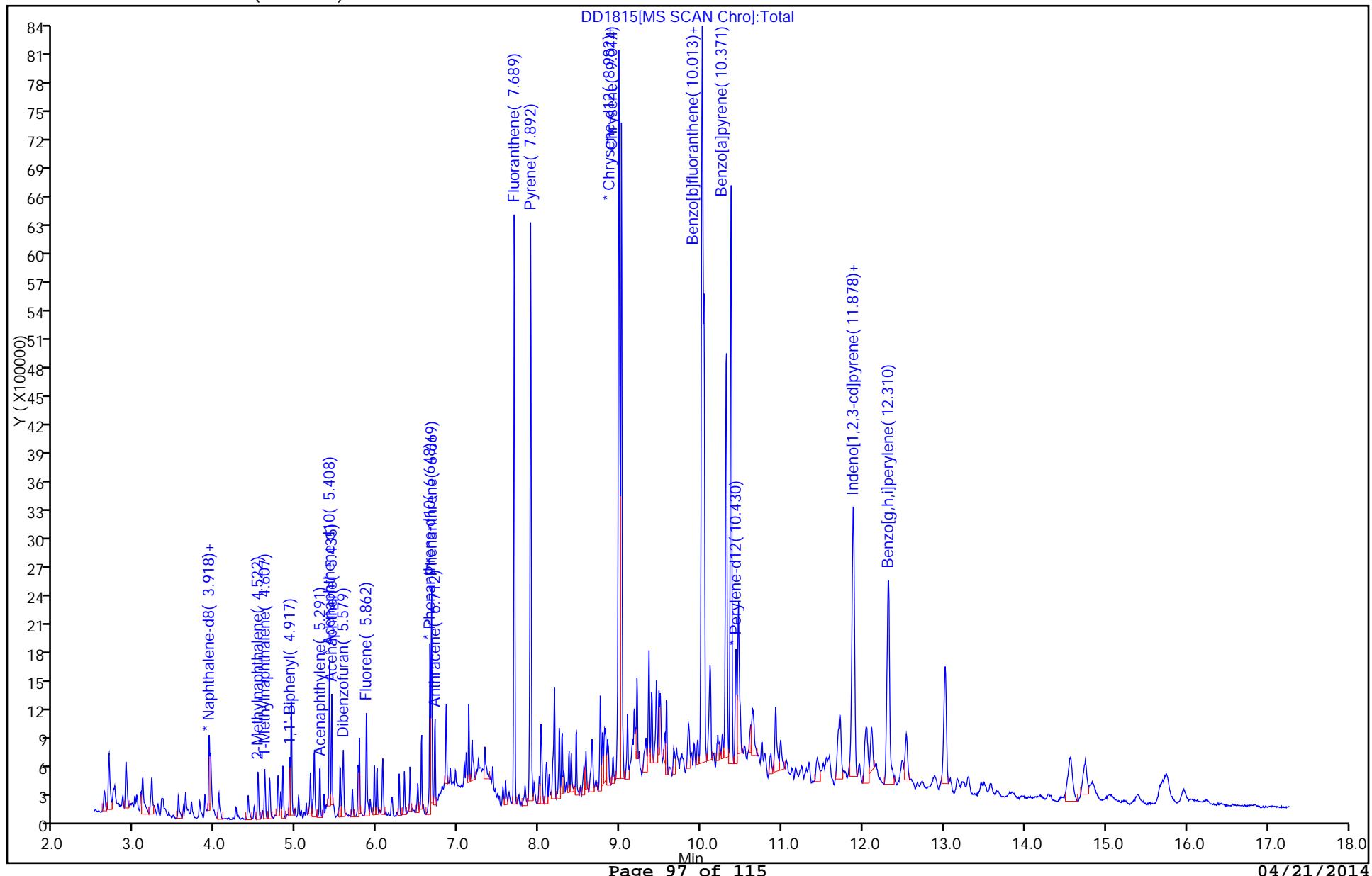
M - Manually Integrated

Report Date: 19-Apr-2014 13:27:33

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1815.D
 Injection Date: 18-Apr-2014 16:45:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-B MS Operator ID:
 Client ID: CV0244A-CS6" Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 10.0000 ALS Bottle#: 15
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)



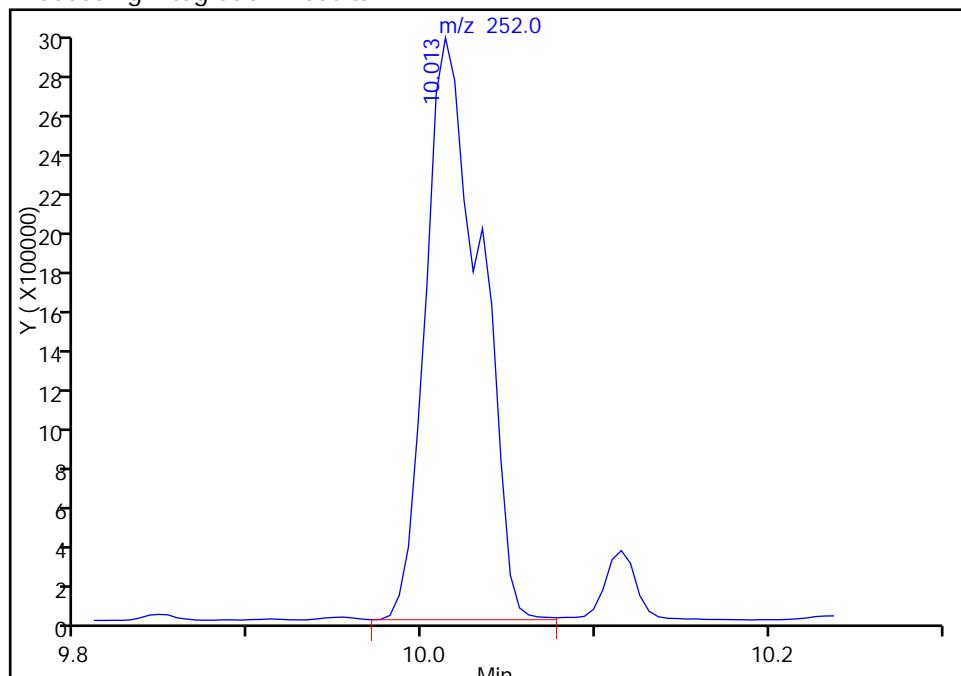
TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1815.D
 Injection Date: 18-Apr-2014 16:45:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-B MS
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

21 Benzo[b]fluoranthene, CAS: 205-99-2

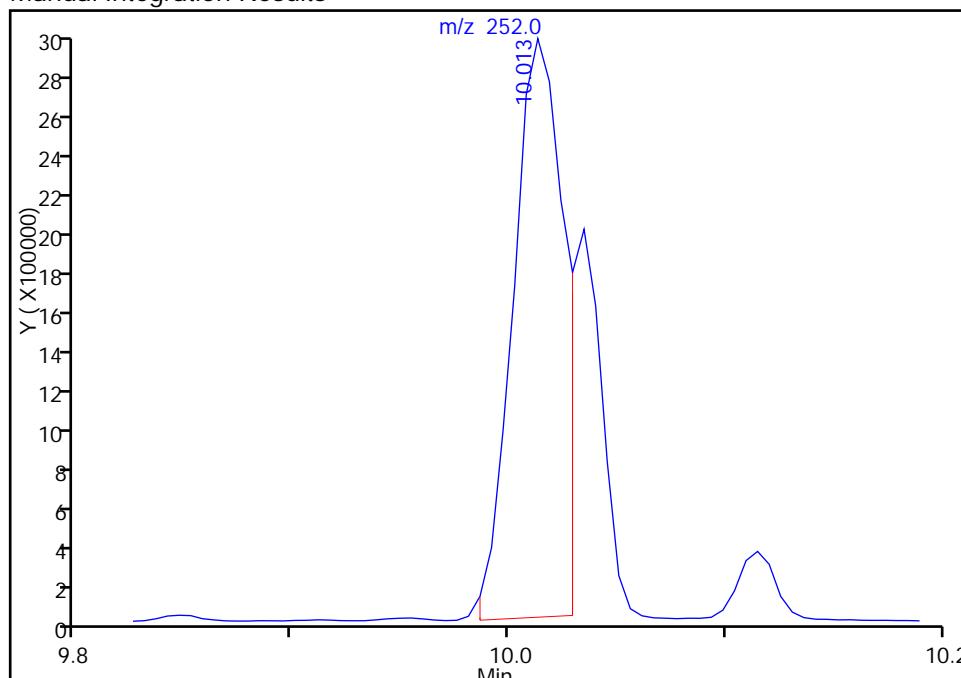
RT: 10.01
 Response: 6379904
 Amount: 18.425614

Processing Integration Results



RT: 10.01
 Response: 4833095
 Amount: 13.958320

Manual Integration Results



Reviewer: moorer, 19-Apr-2014 13:27:33

Audit Action: Manually Integrated

Audit Reason: Split Peak

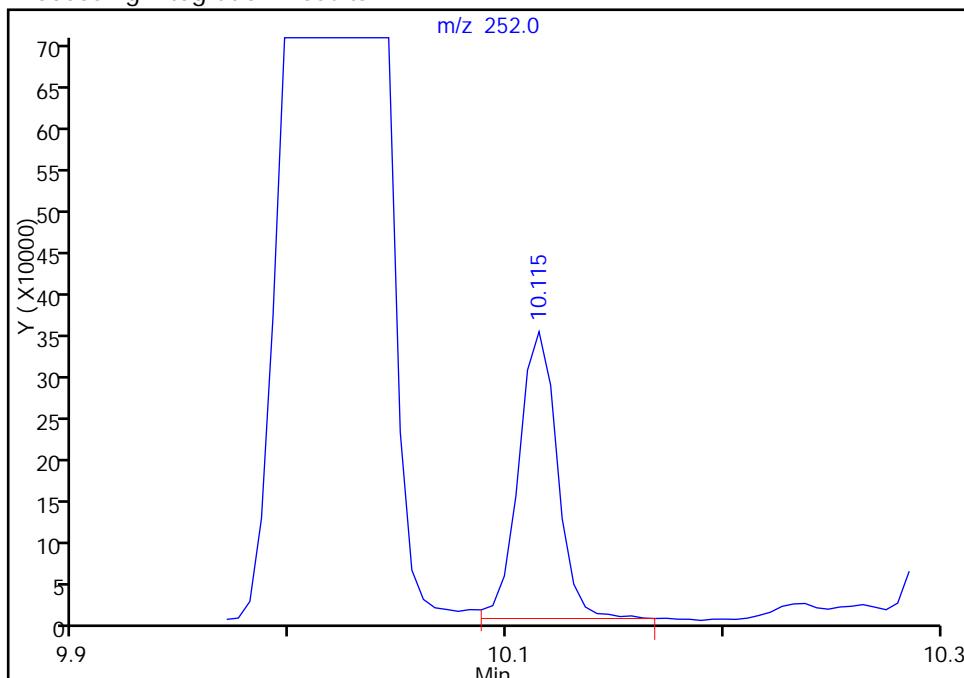
TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1815.D
 Injection Date: 18-Apr-2014 16:45:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-B MS
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

22 Benzo[k]fluoranthene, CAS: 207-08-9

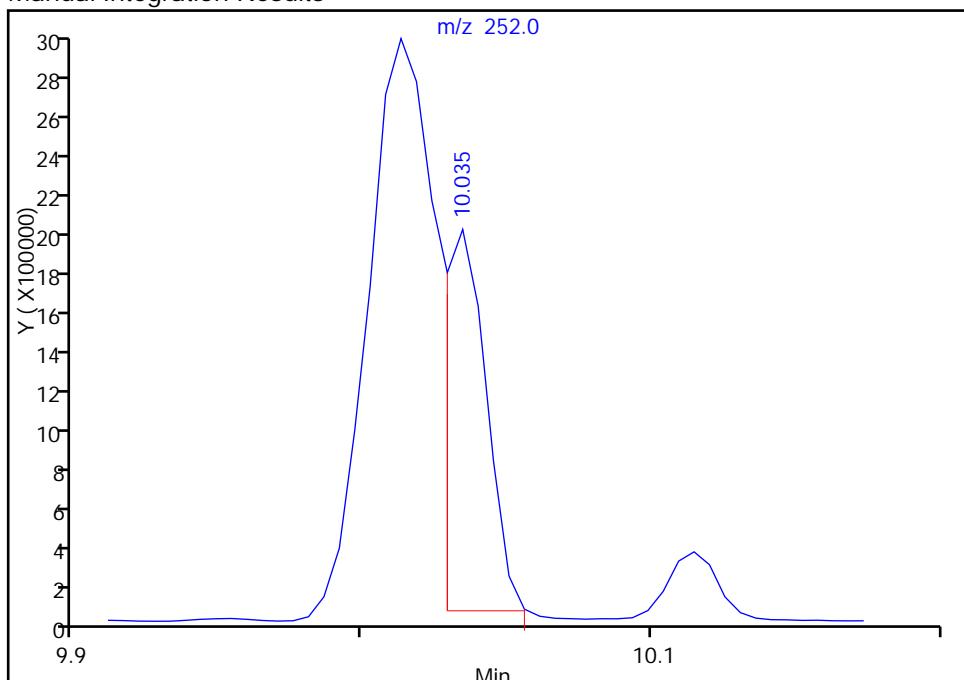
RT: 10.11
 Response: 430086
 Amount: 1.239779

Processing Integration Results



RT: 10.03
 Response: 1938043
 Amount: 5.586662

Manual Integration Results



Reviewer: moorer, 19-Apr-2014 13:27:33

Audit Action: Manually Integrated

Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah	Job No.: 680-100443-1
SDG No.: 680-100443-01	
Client Sample ID: CV0244A-CS6" MSD	Lab Sample ID: 680-100443-2 MSD
Matrix: Solid	Lab File ID: DD1816.D
Analysis Method: 8270D_LL_PAH	Date Collected: 04/12/2014 08:55
Extract. Method: 3546	Date Extracted: 04/16/2014 11:40
Sample wt/vol: 30.03(g)	Date Analyzed: 04/18/2014 17:08
Con. Extract Vol.: 1(mL)	Dilution Factor: 10
Injection Volume: 2(uL)	Level: (low/med) Low
% Moisture: 16.6	GPC Cleanup:(Y/N) N
Analysis Batch No.: 325086	Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	327		80	40
208-96-8	Acenaphthylene	292		80	40
120-12-7	Anthracene	501		80	40
56-55-3	Benzo[a]anthracene	2760		80	40
50-32-8	Benzo[a]pyrene	3950		80	14
205-99-2	Benzo[b]fluoranthene	5800		80	40
191-24-2	Benzo[g,h,i]perylene	2340		80	40
207-08-9	Benzo[k]fluoranthene	2000		80	24
218-01-9	Chrysene	3110		80	40
53-70-3	Dibenz(a,h)anthracene	943		80	40
206-44-0	Fluoranthene	2840		80	40
86-73-7	Fluorene	332		80	40
193-39-5	Indeno[1,2,3-cd]pyrene	2240		80	40
90-12-0	1-Methylnaphthalene	295		80	37
91-57-6	2-Methylnaphthalene	335		80	40
91-20-3	Naphthalene	315		80	40
85-01-8	Phenanthrene	1000		80	29
129-00-0	Pyrene	2410		80	40

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1816.D
 Lims ID: 680-100443-A-2-C MSD
 Client ID: CV0244A-CS6"
 Sample Type: MSD
 Inject. Date: 18-Apr-2014 17:08:30 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Sample Info: 100443-A-2-A MSD; DL10
 Misc. Info.: 680-0008209-016
 Operator ID: Instrument ID: CMSD
 Method: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\8270_LLPAH_CMSD.m
 Limit Group: 8270D_LL_PAH
 Last Update: 19-Apr-2014 13:48:47 Calib Date: 18-Apr-2014 13:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICAL File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1808.D
 Column 1 : Restek RXi-5Sil MS (0.25 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: moorer Date: 19-Apr-2014 13:48:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
* 1 Naphthalene-d8	136	3.923	3.920	0.003	99	784245	0.2000	2.00	
* 2 Acenaphthene-d10	164	5.408	5.405	0.003	91	441248	0.2000	2.00	
* 3 Phenanthrene-d10	188	6.648	6.645	0.003	98	734632	0.2000	2.00	
* 4 Chrysene-d12	240	8.993	8.990	0.003	97	830426	0.2000	2.00	
* 5 Perylene-d12	264	10.435	10.427	0.008	97	642405	0.2000	2.00	
7 Naphthalene	128	3.939	3.936	0.003	99	318729	1.00	0.7891	
9 2-Methylnaphthalene	142	4.521	4.519	0.002	82	217907	1.00	0.8398	
8 1-Methylnaphthalene	142	4.607	4.604	0.003	82	197795	1.00	0.7386	
10 1,1'-Biphenyl	154	4.917	4.914	0.003	99	228035	1.00	0.6739	
11 Acenaphthylene	152	5.285	5.283	0.002	97	276406	1.00	0.7305	
12 Acenaphthene	153	5.435	5.432	0.003	94	206854	1.00	0.8189	
13 Dibenzofuran	168	5.579	5.576	0.003	99	280237	1.00	0.7602	
14 Fluorene	166	5.868	5.865	0.003	89	229483	1.00	0.8303	
15 Phenanthrene	178	6.669	6.666	0.003	97	1028496	1.00	2.50	
16 Anthracene	178	6.712	6.709	0.003	98	445936	1.00	1.26	
17 Fluoranthene	202	7.689	7.687	0.003	98	3132879	1.00	7.12	
18 Pyrene	202	7.892	7.890	0.002	98	3024172	1.00	6.05	
19 Benzo[a]anthracene	228	8.982	8.979	0.003	98	2938091	1.00	6.91	
20 Chrysene	228	9.020	9.011	0.009	96	3289925	1.00	7.78	
21 Benzo[b]fluoranthene	252	10.019	10.005	0.014	97	5889895	1.00	14.5	
22 Benzo[k]fluoranthene	252	10.040	10.032	0.008	97	2033066	1.00	5.01	M
23 Benzo[a]pyrene	252	10.371	10.363	0.008	96	3320489	1.00	9.88	
24 Indeno[1,2,3-cd]pyrene	276	11.883	11.869	0.014	98	2190679	1.00	5.60	
25 Dibenz(a,h)anthracene	278	11.894	11.896	-0.002	61	766683	1.00	2.36	
26 Benzo[g,h,i]perylene	276	12.321	12.307	0.014	93	1966831	1.00	5.85	
28 4,4'-DDD	235	6.338	6.405	-0.067	1	341		NR	7
29 4,4'-DDT	235	6.498	6.624	-0.126	1	1583		NR	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

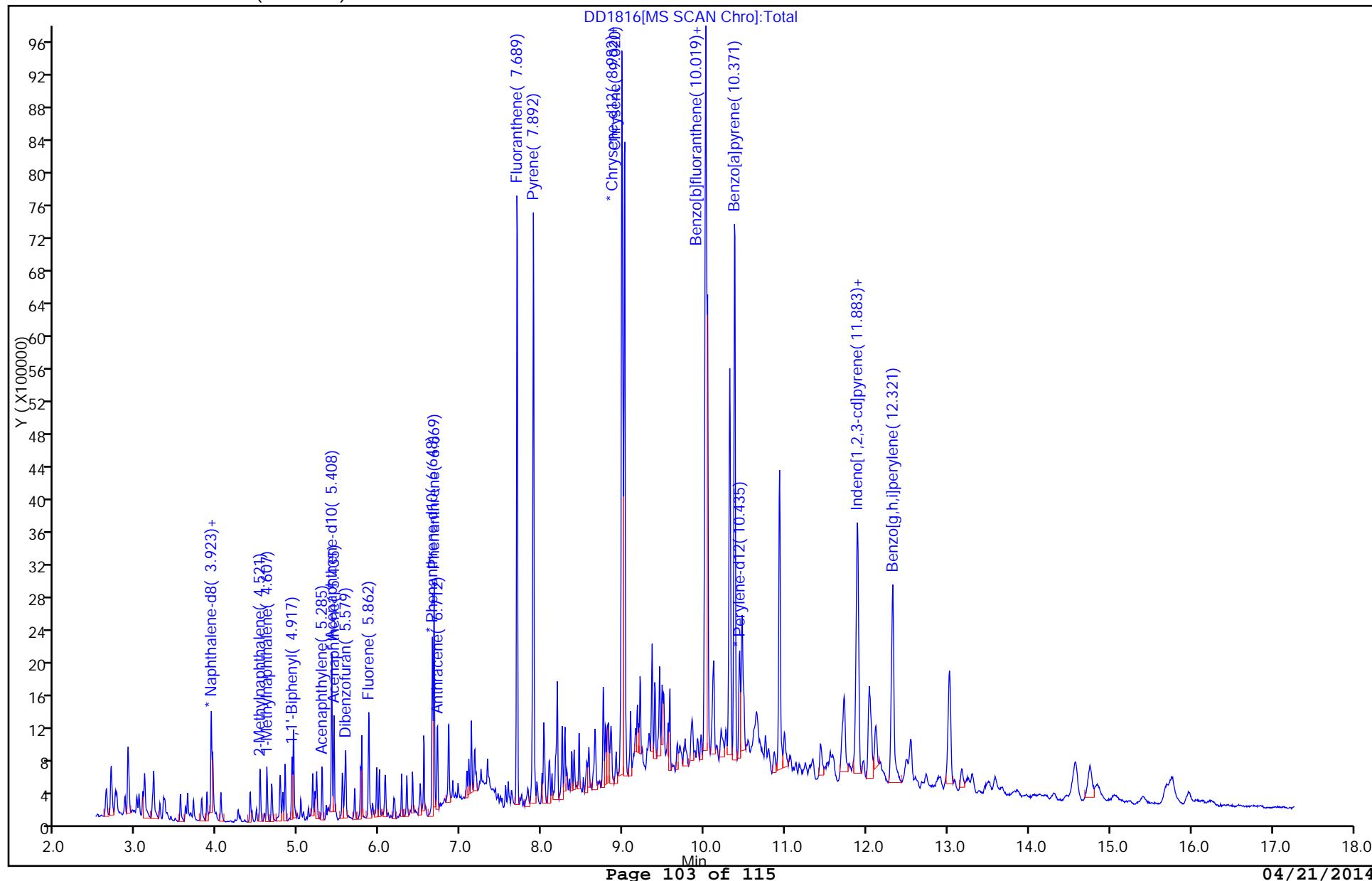
M - Manually Integrated

Report Date: 19-Apr-2014 13:48:59

Chrom Revision: 2.2 14-Apr-2014 13:40:08

TestAmerica Savannah

Data File: \SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1816.D
 Injection Date: 18-Apr-2014 17:08:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-C MSD Operator ID:
 Client ID: CV0244A-CS6" Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 10.0000 ALS Bottle#: 16
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm)



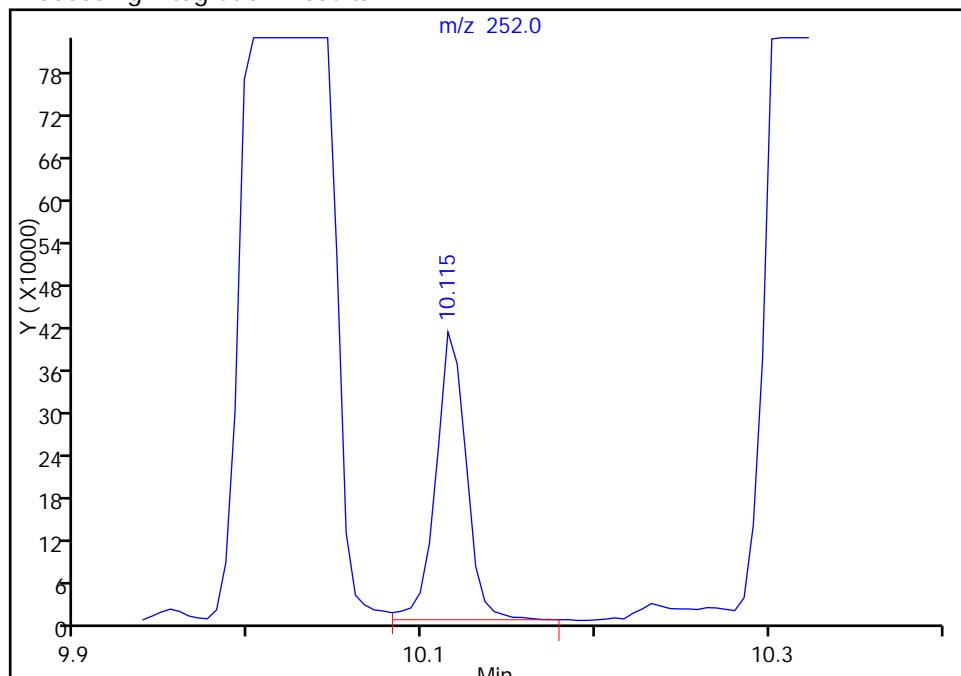
TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CMSD\20140418-8209.b\DD1816.D
 Injection Date: 18-Apr-2014 17:08:30 Instrument ID: CMSD
 Lims ID: 680-100443-A-2-C MSD
 Client ID: CV0244A-CS6"
 Operator ID: ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 10.0000
 Method: 8270_LLPAH_CMSD Limit Group: 8270D_LL_PAH
 Column: Restek RXi-5Sil MS (0.25 mm) Detector: MS SCAN

22 Benzo[k]fluoranthene, CAS: 207-08-9

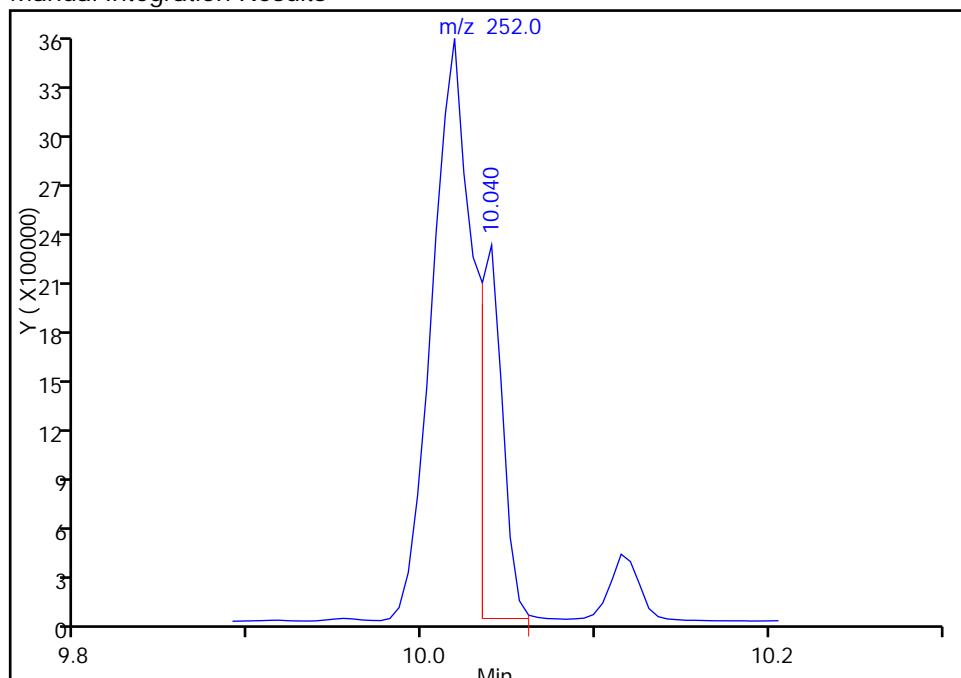
RT: 10.11
 Response: 490805
 Amount: 1.208309

Processing Integration Results



RT: 10.04
 Response: 2033066
 Amount: 5.005190

Manual Integration Results



Reviewer: moorer, 19-Apr-2014 13:33:38

Audit Action: Manually Integrated

Audit Reason: Split Peak

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-100443-1
SDG No.: 680-100443-01
Instrument ID: CMSD Start Date: 04/18/2014 11:08
Analysis Batch Number: 325086 End Date: 04/18/2014 17:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 680-325086/1		04/18/2014 11:08	1	DD1801.D	RXi- 5Sil MS 0.25 (mm)
ICIS 680-325086/2		04/18/2014 11:34	1	DD1802.D	RXi- 5Sil MS 0.25 (mm)
IC 680-325086/3		04/18/2014 11:57	1	DD1803.D	RXi- 5Sil MS 0.25 (mm)
IC 680-325086/4		04/18/2014 12:20	1	DD1804.D	RXi- 5Sil MS 0.25 (mm)
IC 680-325086/5		04/18/2014 12:43	1	DD1805.D	RXi- 5Sil MS 0.25 (mm)
IC 680-325086/6		04/18/2014 13:06	1	DD1806.D	RXi- 5Sil MS 0.25 (mm)
IC 680-325086/7		04/18/2014 13:29	1	DD1807.D	RXi- 5Sil MS 0.25 (mm)
IC 680-325086/8		04/18/2014 13:52	1	DD1808.D	RXi- 5Sil MS 0.25 (mm)
ICV 680-325086/9		04/18/2014 14:15	1	DD1809.D	RXi- 5Sil MS 0.25 (mm)
ZZZZZ		04/18/2014 14:50	1		RXi- 5Sil MS 0.25 (mm)
ZZZZZ		04/18/2014 15:36	1		RXi- 5Sil MS 0.25 (mm)
MB 680-324604/3-A		04/18/2014 15:59	1	DD1813.D	RXi- 5Sil MS 0.25 (mm)
LCS 680-324604/4-A		04/18/2014 16:22	1	DD1814.D	RXi- 5Sil MS 0.25 (mm)
680-100443-2 MS	CV0244A-CS6" MS	04/18/2014 16:45	10	DD1815.D	RXi- 5Sil MS 0.25 (mm)
680-100443-2 MSD	CV0244A-CS6" MSD	04/18/2014 17:08	10	DD1816.D	RXi- 5Sil MS 0.25 (mm)
680-100443-2	CV0244A-CS6"	04/18/2014 17:31	10	DD1817.D	RXi- 5Sil MS 0.25 (mm)
680-100443-3	CV0244A-CS12"	04/18/2014 17:54	10	DD1818.D	RXi- 5Sil MS 0.25 (mm)

8270D_LL_PAH

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Batch Number: 324604

Batch Start Date: 04/16/14 11:40

Batch Analyst: Vasquez, Juana M

Batch Method: 3546

Batch End Date: 04/16/14 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EX8270SPKL1 00003	LLBNAwksUR 00071	AnalysisComment	
680-100443-A-2	CV0244A-CS6"	3546, 8270D LL PAH	T	30.01 g	1 mL		1 mL		
680-100443-A-3	CV0244A-CS12"	3546, 8270D LL PAH	T	30.04 g	1 mL		1 mL		
MB 680-324604/3		3546, 8270D LL PAH		29.99 g	1 mL		1 mL		
LCS 680-324604/4		3546, 8270D LL PAH		30.04 g	1 mL	100 uL	1 mL	LLBNA	
680-100443-A-2 MS	CV0244A-CS6"	3546, 8270D LL PAH	T	29.99 g	1 mL	100 uL	1 mL	LLBNA	
680-100443-A-2 MSD	CV0244A-CS6"	3546, 8270D LL PAH	T	30.03 g	1 mL	100 uL	1 mL	LLBNA	

Batch Notes

Balance ID	30
Batch Comment	8270LL Box M 889
Person's name who did the concentration	JV
Exchange Solvent Lot #	3534120
Exchange Solvent Name	MeC12
Filter Paper Lot Number	09-795G
Final Concentrator Volume	1 mL
MeC12 Lot #	3534120
MeC12/Acetone Lot #	3414692
Microwave Start Time	1140
Microwave Stop Time	1210
Na2SO4 Lot Number	3534778
Ottawa Sand Lot #	3507615
Person's name who did the prep	JV
Person who performed Spike	JV
Person who witnessed spiking	MAV

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D_LL_PAH

Page 1 of 1

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job Number: 680-100443-1

SDG No.: 680-100443-01

Project: 35th Avenue Superfund Site

Client Sample ID
CV0244A-CS6"
CV0244A-CS12"

Lab Sample ID
680-100443-2
680-100443-3

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-100443-1

SDG Number: 680-100443-01

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/01/2005 13:43

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.01	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-100443-1

SDG Number: 680-100443-01

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

XRL Date: 04/09/2011 17:03

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.01	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job No.: 680-100443-1

SDG No.: 680-100443-01

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/16/2014 09:04 End Date: 04/16/2014 09:05

Prep Types

$$T = \text{Total/NA}$$

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Savannah

Job No.: 680-100443-1

SDG No.: 680-100443-01

Batch Number: 324583

Batch Start Date: 04/16/14 09:04

Batch Analyst: Kicklighter, Marilyn D

Batch Method: Moisture

Batch End Date: 04/17/14 08:53

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
680-100443-A-2	CV0244A-CS6"	Moisture	T	1.29 g	8.27 g	7.12 g			
680-100443-A-2 MS	CV0244A-CS6"	Moisture	T	1.29 g	8.27 g	7.11 g			
680-100443-A-2 MSD	CV0244A-CS6"	Moisture	T	1.29 g	8.27 g	7.11 g			
680-100443-A-3	CV0244A-CS12"	Moisture	T	1.28 g	8.31 g	6.89 g			

Batch Notes

Balance ID	19 No Unit
Date samples were placed in the oven	04/16/14
Oven Temp when samples are put in oven	110 Degrees C
Time samples were place in the oven	09:10
Date samples were removed from oven	04/17/14
Oven Temp when samples removed from oven	110 Degrees C
Time Samples were removed from oven	08:53
Oven ID	cuo2
ID number of the thermometer	cuo2

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Moisture

Page 1 of 1

Shipping and Receiving Documents

Serial Numbe

78011

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

PROJECT REFERENCE <u>35th Ave Removal</u>		PROJECT NO. <u>2010101-5000-61</u>	PROJECT LOCATION (STATE) <u>AL</u>	MATRIX TYPE	REQUIRED ANALYSIS								PAGE <u>1</u>	OF <u>1</u>					
TAL (LAB) PROJECT MANAGER <u>Lisa Harvey</u>		P.O. NUMBER	CONTRACT NO.												STANDARD REPORT DELIVERY				
CLIENT (SITE) PM <u>Russell Henderson</u>		CLIENT PHONE <u>678)255-6156</u>	CLIENT FAX <u>(770)528-6167</u>												DATE DUE <u> </u>				
CLIENT NAME <u>OTIE</u>		CLIENT E-MAIL <u>r.henderson@otie.com</u>													EXPEDITED REPORT DELIVERY (SURCHARGE)				
CLIENT ADDRESS <u>1220 KenneStone Cir, Marietta, GA 30060</u>															DATE DUE <u> </u>				
COMPANY CONTRACTING THIS WORK (if applicable)															NUMBER OF COOLERS SUBMITTED PER SHIPMENT:				
SAMPLE		SAMPLE IDENTIFICATION			NUMBER OF CONTAINERS SUBMITTED												REMARKS		
DATE	TIME				C	X	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	PRESErvATIVE									
4/11/14	1200	CV0244B -CS24"			C	X				X								Standard TAT	
4/12/14	0855	CV0244A -CSU"			C	X				X								•ASAP TAT•	
4/12/14	0930	CV0244A -CS12"			C	X				X								•ASAP TAT•	
RELINQUISHED BY: (SIGNATURE) <u>Lolajip</u>		DATE <u>4/14/14</u>	TIME <u>1200</u>	RELINQUISHED BY: (SIGNATURE)			DATE	TIME	RELINQUISHED BY: (SIGNATURE)			DATE	TIME						
RECEIVED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)			DATE	TIME				DATE	TIME						

RECEIVED FOR LABORATORY BY:
(SIGNATURE)

DATE

TIME

CUSTODY INTACT

INDIA

14

BO-100443 Chain of Custody

—

[View Details](#)

DATE 04-15-24 TIME 1956 SEC. 111
YES
NO

LABORATORY USE ONLY



680-100443 Chain of Custod

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1

SDG Number: 680-100443-01

Login Number: 100443

List Source: TestAmerica Savannah

List Number: 1

Creator: Banda, Christy S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-100443-1

TestAmerica Sample Delivery Group: 680-100443-01

Client Project/Site: 35th Avenue Superfund Site

For:

Oneida Total Integrated Enterprises LLC
1220 Kennestone Circle
Suite 106
Marietta, Georgia 30060

Attn: Ms. Limari F Krebs



Authorized for release by:

4/21/2014 3:07:35 PM

Lisa Harvey, Project Manager II

(912)354-7858 e.3221

lisa.harvey@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?

Ask
The
Expert

Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Case Narrative

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
SDG: 680-100443-01

Job ID: 680-100443-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-100443-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 04/15/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

SEMOVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH

Samples CV0244A-CS6" (680-100443-2) and CV0244A-CS12" (680-100443-3) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW846 Method 8270D.

Method(s) 8270D_LL_PAH: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 680-325086 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D_LL_PAH: The following sample(s) was diluted due to the nature of the sample matrix : CV0244A-CS12" (680-100443-3), CV0244A-CS6" (680-100443-2), CV0244A-CS6" (680-100443-2 MS), CV0244A-CS6" (680-100443-2 MSD). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

PERCENT SOLIDS/MOISTURE

Samples CV0244A-CS6" (680-100443-2) and CV0244A-CS12" (680-100443-3) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP.

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
SDG: 680-100443-01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-100443-2	CV0244A-CS6"	Solid	04/12/14 08:55	04/15/14 09:56
680-100443-3	CV0244A-CS12"	Solid	04/12/14 09:30	04/15/14 09:56

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Method Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
SDG: 680-100443-01

Method	Method Description	Protocol	Laboratory
8270D_LL_PAH	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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Definitions/Glossary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
SDG: 680-100443-01

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
 SDG: 680-100443-01

Client Sample ID: CV0244A-CS6"

Date Collected: 04/12/14 08:55

Date Received: 04/15/14 09:56

Lab Sample ID: 680-100443-2

Matrix: Solid

Percent Solids: 83.5

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	41	J	80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Acenaphthylene	80	U	80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Anthracene	160		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Benzo[a]anthracene	2200		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Benzo[a]pyrene	3200		80	14	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Benzo[b]fluoranthene	4500		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Benzo[g,h,i]perylene	2000		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Benzo[k]fluoranthene	1600		80	24	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Chrysene	2500		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Dibenz(a,h)anthracene	660		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Fluoranthene	2200		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Fluorene	80	U	80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Indeno[1,2,3-cd]pyrene	2000		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
1-Methylnaphthalene	80	U	80	37	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
2-Methylnaphthalene	41	J	80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Naphthalene	80	U	80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Phenanthrene	630		80	29	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Pyrene	2000		80	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:31	10
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl		0	D	36 - 131			04/16/14 11:40	04/18/14 17:31	10

Client Sample ID: CV0244A-CS12"

Date Collected: 04/12/14 09:30

Date Received: 04/15/14 09:56

Lab Sample ID: 680-100443-3

Matrix: Solid

Percent Solids: 79.8

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	84	U	84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Acenaphthylene	53	J	84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Anthracene	80	J	84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Benzo[a]anthracene	560		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Benzo[a]pyrene	630		84	15	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Benzo[b]fluoranthene	950		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Benzo[g,h,i]perylene	440		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Benzo[k]fluoranthene	330		84	25	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Chrysene	680		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Dibenz(a,h)anthracene	120		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Fluoranthene	820		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Fluorene	84	U	84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Indeno[1,2,3-cd]pyrene	370		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
1-Methylnaphthalene	150		84	39	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
2-Methylnaphthalene	170		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Naphthalene	120		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Phenanthrene	420		84	30	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Pyrene	760		84	41	ug/Kg	⊗	04/16/14 11:40	04/18/14 17:54	10
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl		0	D	36 - 131			04/16/14 11:40	04/18/14 17:54	10

TestAmerica Savannah

QC Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
 SDG: 680-100443-01

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: MB 680-324604/3-A

Matrix: Solid

Analysis Batch: 325086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 324604

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Acenaphthylene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Anthracene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Benzo[a]anthracene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Benzo[a]pyrene	6.7	U	6.7	1.2	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Benzo[b]fluoranthene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Benzo[g,h,i]perylene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Benzo[k]fluoranthene	6.7	U	6.7	2.0	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Chrysene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Dibenz(a,h)anthracene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Fluoranthene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Fluorene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Indeno[1,2,3-cd]pyrene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
1-Methylnaphthalene	6.7	U	6.7	3.1	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
2-Methylnaphthalene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Naphthalene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Phenanthrene	6.7	U	6.7	2.4	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Pyrene	6.7	U	6.7	3.3	ug/Kg		04/16/14 11:40	04/18/14 15:59	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier					04/16/14 11:40	04/18/14 15:59	1
<i>o-Terphenyl</i>	87		36 - 131						

Lab Sample ID: LCS 680-324604/4-A

Matrix: Solid

Analysis Batch: 325086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 324604

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.	
	Added	Result	Qualifier						
Acenaphthene	333	258		ug/Kg		77	33 - 130		
Acenaphthylene	333	254		ug/Kg		76	37 - 131		
Anthracene	333	313		ug/Kg		94	42 - 146		
Benzo[a]anthracene	333	286		ug/Kg		86	39 - 157		
Benzo[a]pyrene	333	296		ug/Kg		89	41 - 158		
Benzo[b]fluoranthene	333	270		ug/Kg		81	35 - 152		
Benzo[g,h,i]perylene	333	266		ug/Kg		80	32 - 150		
Benzo[k]fluoranthene	333	275		ug/Kg		82	38 - 148		
Chrysene	333	255		ug/Kg		77	38 - 147		
Dibenz(a,h)anthracene	333	291		ug/Kg		87	32 - 155		
Fluoranthene	333	285		ug/Kg		86	36 - 147		
Fluorene	333	280		ug/Kg		84	36 - 138		
Indeno[1,2,3-cd]pyrene	333	283		ug/Kg		85	35 - 148		
1-Methylnaphthalene	333	237		ug/Kg		71	36 - 130		
2-Methylnaphthalene	333	261		ug/Kg		78	42 - 130		
Naphthalene	333	237		ug/Kg		71	33 - 130		
Phenanthrene	333	264		ug/Kg		79	40 - 135		
Pyrene	333	259		ug/Kg		78	38 - 145		

QC Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
 SDG: 680-100443-01

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: LCS 680-324604/4-A

Matrix: Solid

Analysis Batch: 325086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 324604

Surrogate	LCS	LCS
	%Recovery	Qualifier
o-Terphenyl	73	36 - 131

Lab Sample ID: 680-100443-2 MS

Matrix: Solid

Analysis Batch: 325086

Client Sample ID: CV0244A-CS6"

Prep Type: Total/NA

Prep Batch: 324604

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Acenaphthene	41	J	400	340		ug/Kg	⊗	75	33 - 130
Acenaphthylene	80	U	400	298		ug/Kg	⊗	75	37 - 131
Anthracene	160		400	512		ug/Kg	⊗	88	42 - 146
Benzo[a]anthracene	2200		400	2920	4	ug/Kg	⊗	172	39 - 157
Benzo[a]pyrene	3200		400	4210	4	ug/Kg	⊗	242	41 - 158
Benzo[b]fluoranthene	4500		400	5580	4	ug/Kg	⊗	266	35 - 152
Benzo[g,h,i]perylene	2000		400	2560	4	ug/Kg	⊗	146	32 - 150
Benzo[k]fluoranthene	1600		400	2230	F1	ug/Kg	⊗	160	38 - 148
Chrysene	2500		400	3280	4	ug/Kg	⊗	188	38 - 147
Dibenz(a,h)anthracene	660		400	1020		ug/Kg	⊗	91	32 - 155
Fluoranthene	2200		400	2850	4	ug/Kg	⊗	172	36 - 147
Fluorene	80	U	400	339		ug/Kg	⊗	85	36 - 138
Indeno[1,2,3-cd]pyrene	2000		400	2630	4	ug/Kg	⊗	159	35 - 148
1-Methylnaphthalene	80	U	400	302		ug/Kg	⊗	75	36 - 130
2-Methylnaphthalene	41	J	400	343		ug/Kg	⊗	75	42 - 130
Naphthalene	80	U	400	322		ug/Kg	⊗	80	33 - 130
Phenanthrene	630		400	1010		ug/Kg	⊗	95	40 - 135
Pyrene	2000		400	2520	4	ug/Kg	⊗	139	38 - 145

Surrogate	MS	MS
	%Recovery	Qualifier
o-Terphenyl	0	D

Lab Sample ID: 680-100443-2 MSD

Matrix: Solid

Analysis Batch: 325086

Client Sample ID: CV0244A-CS6"

Prep Type: Total/NA

Prep Batch: 324604

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acenaphthene	41	J	399	327		ug/Kg	⊗	72	33 - 130	4	50
Acenaphthylene	80	U	399	292		ug/Kg	⊗	73	37 - 131	2	50
Anthracene	160		399	501		ug/Kg	⊗	86	42 - 146	2	50
Benzo[a]anthracene	2200		399	2760	4	ug/Kg	⊗	133	39 - 157	5	50
Benzo[a]pyrene	3200		399	3950	4	ug/Kg	⊗	177	41 - 158	6	50
Benzo[b]fluoranthene	4500		399	5800	4	ug/Kg	⊗	321	35 - 152	4	50
Benzo[g,h,i]perylene	2000		399	2340	4	ug/Kg	⊗	90	32 - 150	9	50
Benzo[k]fluoranthene	1600		399	2000		ug/Kg	⊗	101	38 - 148	11	50
Chrysene	2500		399	3110	4	ug/Kg	⊗	145	38 - 147	5	50
Dibenz(a,h)anthracene	660		399	943		ug/Kg	⊗	72	32 - 155	8	50
Fluoranthene	2200		399	2840	4	ug/Kg	⊗	171	36 - 147	0	50
Fluorene	80	U	399	332		ug/Kg	⊗	83	36 - 138	2	50
Indeno[1,2,3-cd]pyrene	2000		399	2240	4	ug/Kg	⊗	61	35 - 148	16	50
1-Methylnaphthalene	80	U	399	295		ug/Kg	⊗	74	36 - 130	2	50

TestAmerica Savannah

QC Sample Results

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
 SDG: 680-100443-01

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: 680-100443-2 MSD

Matrix: Solid

Analysis Batch: 325086

Client Sample ID: CV0244A-CS6"

Prep Type: Total/NA

Prep Batch: 324604

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
2-Methylnaphthalene	41	J	399	335		ug/Kg	⊗	74	42 - 130	2	50
Naphthalene	80	U	399	315		ug/Kg	⊗	79	33 - 130	2	50
Phenanthrene	630		399	1000		ug/Kg	⊗	92	40 - 135	1	50
Pyrene	2000		399	2410	4	ug/Kg	⊗	112	38 - 145	4	50
Surrogate				MSD	MSD						
<i>o-Terphenyl</i>				%Recovery	Qualifier	Limits					
				0	D	36 - 131					

QC Association Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
SDG: 680-100443-01

GC/MS Semi VOA

Prep Batch: 324604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-100443-2	CV0244A-CS6"	Total/NA	Solid	3546	
680-100443-2 MS	CV0244A-CS6"	Total/NA	Solid	3546	
680-100443-2 MSD	CV0244A-CS6"	Total/NA	Solid	3546	
680-100443-3	CV0244A-CS12"	Total/NA	Solid	3546	
LCS 680-324604/4-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-324604/3-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 325086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-100443-2	CV0244A-CS6"	Total/NA	Solid	8270D_LL_PAH	324604
680-100443-2 MS	CV0244A-CS6"	Total/NA	Solid	8270D_LL_PAH	324604
680-100443-2 MSD	CV0244A-CS6"	Total/NA	Solid	8270D_LL_PAH	324604
680-100443-3	CV0244A-CS12"	Total/NA	Solid	8270D_LL_PAH	324604
LCS 680-324604/4-A	Lab Control Sample	Total/NA	Solid	8270D_LL_PAH	324604
MB 680-324604/3-A	Method Blank	Total/NA	Solid	8270D_LL_PAH	324604

General Chemistry

Analysis Batch: 324583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-100443-2	CV0244A-CS6"	Total/NA	Solid	Moisture	
680-100443-2 MS	CV0244A-CS6"	Total/NA	Solid	Moisture	
680-100443-2 MSD	CV0244A-CS6"	Total/NA	Solid	Moisture	
680-100443-3	CV0244A-CS12"	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Oneida Total Integrated Enterprises LLC
 Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
 SDG: 680-100443-01

Client Sample ID: CV0244A-CS6"

Lab Sample ID: 680-100443-2

Date Collected: 04/12/14 08:55

Matrix: Solid

Date Received: 04/15/14 09:56

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.01 g	1 mL	324604	04/16/14 11:40	JMV	TAL SAV
Total/NA	Analysis	8270D_LL_PAH		10	30.01 g	1 mL	325086	04/18/14 17:31	RAM	TAL SAV
		Instrument ID: CMSD								
Total/NA	Analysis	Moisture			1		324583	04/16/14 09:04	MDK	TAL SAV
		Instrument ID: NOEQUIP								

Client Sample ID: CV0244A-CS12"

Lab Sample ID: 680-100443-3

Date Collected: 04/12/14 09:30

Matrix: Solid

Date Received: 04/15/14 09:56

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.04 g	1 mL	324604	04/16/14 11:40	JMV	TAL SAV
Total/NA	Analysis	8270D_LL_PAH		10	30.04 g	1 mL	325086	04/18/14 17:54	RAM	TAL SAV
		Instrument ID: CMSD								
Total/NA	Analysis	Moisture			1		324583	04/16/14 09:05	MDK	TAL SAV
		Instrument ID: NOEQUIP								

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 78011

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

N/A

Phone:
Fax:

N/A

PROJECT REFERENCE <i>35th Ave Removal</i>		PROJECT NO. <i>2010101-5000-01</i>	PROJECT LOCATION (STATE) <i>AL</i>	MATRIX TYPE	REQUIRED ANALYSIS						PAGE <i>1</i> OF <i>1</i>			
TAL (LAB) PROJECT MANAGER <i>Lisa Harvey</i>		P.O. NUMBER	CONTRACT NO.									STANDARD REPORT DELIVERY		
CLIENT (SITE) PM <i>Russell Henderson</i>		CLIENT PHONE <i>678)255-4156</i>	CLIENT FAX <i>(770)528-6147</i>	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS WATER)	SOLID OR SEMI-SOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT,...)				DATE DUE <i>0</i>		
CLIENT NAME <i>OTIE</i>		CLIENT E-MAIL <i>r.henderson@otie.com</i>										EXPEDITED REPORT DELIVERY (SURCHARGE)		
CLIENT ADDRESS <i>1220 Kennestone Cir, Marietta, GA 30060</i>		PRESERVATIVE										DATE DUE		
COMPANY CONTRACTING THIS WORK (if applicable)													NUMBER OF COOLERS SUBMITTED PER SHIPMENT:	
SAMPLE		SAMPLE IDENTIFICATION			NUMBER OF CONTAINERS SUBMITTED								REMARKS	
DATE	TIME				C	X	X	X	X	X	X	X	Standard TAT or ^{PB} AS	
4/11/14	1420	CV0244B -CS24"			C	X	X	X	X	X	X	X	•ASAP TAT.	
4/12/14	0855	CV0244 A-CS6"			C	X	X	X	X	X	X	X	•ASAP TAT.	
4/12/14	0930	CV0244 A-CS12"			C	X	X	X	X	X	X	X	•ASAP TAT.	
RELINQUISHED BY: (SIGNATURE) <i>John Baechle</i>		DATE <i>4/14/14</i>	TIME <i>1200</i>	RELINQUISHED BY: (SIGNATURE)			DATE	TIME	RELINQUISHED BY: (SIGNATURE)			DATE	TIME	
RECEIVED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)			DATE	TIME				DATE	TIME	
LABORATORY USE ONLY													680-100443 Chain of Custody	
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>John Baechle</i>		DATE <i>04-15-14</i>	TIME <i>0956</i>	CUSTODY INTACT YES <input checked="" type="radio"/> NO <input type="radio"/>	CUSTODY SEAL NO. <i>00</i>	SAVANNAH LOG NO. <i>680-100443</i>	LAB#	3.4°C						

Login Sample Receipt Checklist

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-100443-1

SDG Number: 680-100443-01

Login Number: 100443

List Source: TestAmerica Savannah

List Number: 1

Creator: Banda, Christy S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-100443-1
SDG: 680-100443-01

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	41450	06-30-14
Florida	NELAP	4	E87052	06-30-14

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